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EXTENSION EDUCATION INSTITUTE
NILOKHERI

GUIDELINES IN TEACHING AGRICULTURAL EXTENSION EDUCATION

Developed by
Instructors of Gram Sevak/Sevika Training Centres
Assam, Rajasthan and U.P.

TWENTYFIRST COURSE

(6-1-69 to 3-3-69)

DIRECTORATE OF EXTENSION
MINISTRY OF FOOD, AGRICULTURE, COMMUNITY DEVELOPMENT AND COOPERATION
NEW DELHI

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GUIDELINES IN TEACHING AGRICULTURAL EXTENSION EDUCATION

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INTRODUCTION

The twenty-first course for Principals and Instructors of the Gramsevak Training Centres commenced on the 6th January for a period of two months. The group consisted of 21 with 14 from Uttar Pradesh, 5 from Rajasthan and 2 from Assam. The participants this time were only instructors and mostly from the field of Agricultural Extension Education.

SYLLABUS

The tentative syllabus was amended to accommodate the topics that the instructors had to teach in their own training centres. According to their request emphasis has been given to the subject of Agricultural Extension Education. The syllabus of the Gramsevak Training Centres was examined with a view to provide relevant topics to reinforce the instructors in their own field of teaching. The changes made by the instructors were included in the syllabus.

LECTURES AND DISCUSSIONS

In addition to topics connected with Extension Education a few pertaining to the subject matter of Animal Husbandry, Cooperation and Home Science were also included. Instead of lectures, the approach has been to help the group discuss topics in detail as they were experienced instructors teaching Agricultural Extension for several years. In this way the group benefitted from each others' experiences as well as the guidance from resource persons.

LESSON PLANS

In this volume the lesson plans pertaining to Agricultural Extension Education only have been included. The instructors who have been teaching Agricultural Extension in their training centres were assigned five plans each. All the topics included in the Gramsevak Training Centre syllabus in Agricultural Extension have been divided among the group of participants. Instead of limiting these attempts to bare outlines the participants have been advised to include as much relevant material as possible in these plans to provide adequate information to such instructors who will be able to use these as reference material. The main object of these exercises has been to help the participants to get a more comprehensive concept of the requirements for teaching Agricultural Extension.

VISUAL AID WORKSHOP

A three day workshop was organized during the course to provide the participants an opportunity to do some creative thinking to prepare suitable and effective visuals for their lesson plans. After lectures and demonstrations on the different type of visuals and their effective use, the participants were divided into groups to prepare their own visuals. With the help of the consultants and an artist a series of visuals have been prepared for most of the lesson plans by the participants themselves.

METHOD DEMONSTRATIONS

To give a systematic approach to the practicals to be conducted on the campus, the participants were assigned method demonstrations from the topics included in the syllabus. Some of these plans have been included in this booklet.

REVIEW AND ANALYSIS

In the assignments of lesson plans, method demonstrations and the preparation of visuals, opportunity has been given to the participants to present these exercises to the group of fellow workers. With the help of two members of the teaching staff each assignment has been evaluated with the main purpose of providing a learning situation to the group. This type of analysis has been the main core of the training programme.

HANDLING OF AUDIO VISUAL EQUIPMENT

The group of participants showed keen interest in developing skills in the use of audio visual equipment. Separate time was allotted for small groups to handle such equipment in order to gain confidence in their use.

STUDY TOUR

A study tour was organised at the Indian Institute of Mass Communication and the Indian Agricultural Research Institute, New Delhi. Arrangements were made for the specialists to present a symposium to this group on Mass Media Communication and National Demonstrations and Farmers' Training Programme. At Udaipur the group studied the farmers' training programme at the Agriculture University.

VILLAGE PRACTICALS

According to the nature of the group assignments such as collection of data, interviewing techniques, study of churcha mandals, review of the films and the study of the radio as an effective medium were taken by this group in three different villages. Demonstrations were also organized according to the seasonal requirements of the subject matter interest of the participants.

BOOKLET

Two separate volumes are being prepared for this group to include the number of lesson plans, method demonstrations and the lectures and discussions arranged for this course. The first volume has been limited to lesson plans and method demonstrations connected with the subject of Agricultural Extension Education. The second volume will contain the lesson plans of the other subject matter groups as well as the lectures and discussions given by the teaching staff and resource persons.

TENTATIVE SYLLABUS FOR THE 21ST COURSE (6.1.69 TO 3.3.69) OF PRINCIPALS AND INSTRUCTORS OF GRAMSEVAK/GRAMSEVIKA TRAINING CENTRES IN TEACHING METHODS AND COMMUNICATION MEDIA.

...

I. EXTENSION EDUCATION AND PROGRAMME PLANNING IN AGRICULTURAL PRODUCTION.

This course is broad in scope covering such items as the Five Year Plans; Organisation, Philosophy and objectives of the National Extension Service and the Community Development Programme, the nature and role of the Extension Education in developing people and helping them, learn ways to meet their needs through aided self-help etc. The course is designed to provide a basic grounding and orientation for all participants with special emphasis on agricultural production and Extension Education.

1. Philosophy and principles of Extension - meeting and scope of extension - basic concepts - change of mental outlook - human behaviour - attitudes - objectives - educational development - voluntary participation - development of the individual and family.

2. Cooperative Extension work in U.S.A., Land Grant College, duties of county agricultural agent, approach to Extension work, comparisons.

3. System of integration of research, education, and extension in the agricultural universities of India.

4. Professional competence of village level workers.

5. Community development programme and its critical analysis by various bodies.

6. Trends in Indian Planning. Fourth Five Year Plan - schemes relating to Agriculture and Animal Husbandry.

7. Programme Planning - definition - principles and procedures - analysis of the situation, objectives - teaching content and method - evaluation - reconsideration.

8. Village agricultural production plan - collection of data, problems, solutions, plan of work, follow-up, evaluation.

9. Role of local insititutions in planning and implementation of agricultural production programmes - panchayats, cooperatives and schools.

10. Role of Extension Education in increasing agricultural production.

11. Follow-up, its importance and significance in training programme.

12. Research studies on the performance of the VLWs in the field and their implications on Extension training.

II. TRAINING OF FARMERS AND RURAL YOUTH

This course aims at improving the efficiency of the human input in the programme of agricultural production in the country. The training of farmers is considered an essential input. The training of farmers will consist of the imparting of the skills necessary for undertaking improved agricultural operations, the availability and assimilation of information on the improved practices and the inculcation of the right attitude towards new ideas and practices.

1. Current problems affecting agricultural production in India.
2. The new strategy of agricultural production in India.
3. High yielding varieties programmes - objectives, content, administration, supplies and review of progress.
4. Characteristics of farmers as adult learners.
5. The scheme of Farmers' training and Education in the High Yielding Varieties Programme Districts.
6. Procedure and Methods of training the farmers - selection of farmers - the syllabus, physical facilities, teaching materials - follow-up.
7. Developmental needs of youth-rural youth programme - role of young farmers in agricultural production.
8. Step-by-step organisation of young farmers clubs at the village, block, district and state levels.
9. How to prepare agricultural and animal husbandry projects for young farmers.
10. How farmers accept new ideas - principles of diffusion - adoption process, adopter categories - their characteristics, utility in Extension.
11. Factors influencing adoption of new farm ideas - motivation - incentives to farmers and young farmers - some research studies.

III. EXTENSION TEACHING METHODS AND COMMUNICATION PROCESS

This course focusses on the nature and use of the various Extension teaching methods and principles of the use of audio-visual materials in the teaching process. It includes such items as:-

a) Theories of learning.

b) Principles of learning and teaching.

c) Characteristics and effective use of various teaching methods.

d) Nature and role of visual and audio-visual materials in teaching.

e) Development of skill on the part of the participants in the actual use of teaching methods.

f) Problems relating to effective communication and ways to solve them.

A. Educational Psychology

1. Theories of learning.

2. Principles and processes of teaching and learning - individual differences, interest and attention.

3. Lesson plans - importance of pre-planning.

4. Effective techniques of conducting a class-elements involved teacher, subject-matter, learner, physical facilities and teaching methods.

5. The function and process of counselling-guidance-role of a teacher as a guide-its need and ways to make it effective.

6. Effective techniques of oral communication - criteria of a good lesson plan.

7. -do-

B. The communication process

8. Extension Teaching Methods, characteristics of extension methods, selection and use.

9. Programmed instruction.

10. Process of communication in the teaching-nature and importance of communication, key elements of communication.

11. How to conduct method demonstration ? Definition, importance steps and problems.

12. How to conduct result demonstration ? Definition, importance, steps and problems.

13. Exhibition-role in extension education, organisation, effectiveness.

14. Practicals and their educational value. How to conduct practicals ?

15. How to write a news article ?

16. Crop campaigns.

C. Audio Visual Education

17. Audio visual materials in extension teaching-significance of audio-visual communication in education-psychological basis of learning through audio visual materials.

18. Operation, constructional details and techniques of handling the opaque projector and slide projector.

19. Operation, constructional details and threading of a victor 16 mm film projector.

D. Visual Aid Workshop

1. Audio-visual teaching materials-various types-merits and demerits.

2. Chalk board-how to make effective use of it.

3. Display boards for teaching-content, background, devices and management.

4. Charts-types of charts, th ir construction and use.

5. Flannelgraphs and flash cards - importance, construction and their effective use.

6. Poster-criteria of a good poster, effective use in Extension.

7. Models-types of models, how they are used, planned, designed and constructed.

8. Drama - as a tool of Extension teaching advantages and disadvantages.

9. Puppets - different types of puppets, their features and use as a tool of communication.

10. Conducted tours - criteria for planning a tour and some trips on making it educational and effective.

11. Film strips and film slides - various types, their effective use in teaching.

12. Films - importance in Extension teaching - preview of films, advantages and disadvantages.

13. Film appreciation - meaning and principles of reviewing.

14. Production and use of literature, e.g. pamphlets, news stories etc.

E. Practicals

1. Developing of teaching plans in their respective subjects.

2. Operation, constructional details and techniques of handling the following projectors:-

   a. Opaque projector.
   b. Slide projector.
   c. 16 mm. film projector.

3. Preparation of the instructional aids as a group project on an educational topic pertaining to the syllabus at Extension Training Centres for example:

   a. Poster
   b. Chart.
   c. Flash cards
   d. Flannelgraphs
   e. Model
   f. Puppets.
   g. Hand made slides.

IV. RURAL SOCIOLOGY

A. Leadership in Extension.

1. Objective and need of group-leadership in Extension teaching -definition, classification and traits.

2. Method of slection of leaders in extension. Basic patterns of leader and group relationship in rural sociology.

B. Rural Community Organisation & Group Mobilisation:

3. Community organisation-principles and methods - problems relating to community organisation.

4. Group-type and characteristics of group-cohesiveness conflict-decision making in group-Extension work through group.

C. Cultural Change

5. Cultural Change-definition-types and process of cultural change-factors causing change.

6. How to bring about a change ? Method and techniques.

7. Social and cultural context of planned change.

8. How to write a case study ?

D. Group Methods in Extension

9. Group methods and their importance in Extension teaching process.

10. Various types of group methods. Advantages and limitations.

    a. Small group discussion.
    b. Large group discussion.
    c. Panel.
    d. Symposium.
    e. Forum.
    f. Sociodrama.

11. How to lead a group discussion ? Role of leader in a discussion.

E. Evaluation in Extension Teaching

12. Importance of evaluation-definition-steps in evaluation-criteria of effective evaluation.

13. Methods and techniques-as related to the classroom, campus and village practicals - job placement.

V. AGRICULTURAL ECONOMICS AND FARM PLANNING

A. Agricultural Economics:

1. Principles and process of economic development-economic institutions-characteristics of underdeveloped economy-importance of capital-different sources-savings.

2. Role of agriculture in economic development of India.

3. Population problems-population explosion, its effects on development, income and food supplies.

4. Cooperative farming-concept, types and growth in India., its influence on agricultural production.

5. Service cooperatives-function, linking credit with production, marketing and loan payment, financial resources-progress, its role in agricultural production and extension education.

6. Cooperative marketing of agricultural produce in India-procedure, advantages, progress and problems.

7. Cottage and small scale industries-objectives, industrial cooperatives-functions and progress. Various organisations, which help in the development of agro-industries. Its importance in agricultural development programme.

8. Food problem, its various effects on society, social, economic, political, health and others.

9. How to meet the problem of food shortage.

10. Steps in conducting social survey-planning-collection-analysis-presenting data.

11. Methods used in surveys-observations-sampling, statistical methods-interview-schedules-questionnaire etc.

12. I.A.D.P. and I.A.A.Programme-orgin, objectives, content administration, supplies and finance, review of progress.

13. -do-

B. Farm Planning

14. Farm management-definition, principles and objectives, layout and organisation, extension and farm management.

15. Fundamentals of farm planning, definition, principles, methods characteristics, use in extension teaching process.

16. The farm planning process-resources, strongand weak points, improvements introduced, alternative plan, comparisons, execution and problems of farm planning, follow-up, evaluation.

VI. GENERAL

1. Problems of diet and nutrition in rural areas.

2. Balanced diet-constituents of balanced diet, balanced diet for different age and occupation groups.

3. Applied Nutrition Programme.

4. Importance of kitchen gardening.

5. Importance of family planning merits and demerits of different methods. Contribution of women extension worker in educating village ladies.

6. -do-

7. Problems of home science extension in rural areas.

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TENTATIVE SYLLABUS FOR THE 21ST COURSE (6.1.69 to 3.3.69) FOR PRINCIPALS AND INSTRUCTORS OF GRAMSEVAK/GRAMSEVIKA TRAINING CENTRES IN TEACHING METHODS AND COMMUNICATION MEDIA.

(Summary of suggestions by the participants)

I. EXTENSION EDUCATION AND PROGRAMME PLANNING IN AGRICULTURAL PRODUCTION:

1. The group desired to know the difference between Extension, Extension Education, and Agricultural Extension Education. Further, they wanted specific and concrete explanations on objectives, concept, philosophy and principles of extension.

2. Delete.

4. The modified topic suggested was " Professional competence of extension workers."

6. The group wanted to treat the Fourth Five Year Plan with special reference to U.P. and comparative review of the Five Year Plans and their achievements.

II. TRAINING OF FARMERS AND RURAL YOUTH:

1. Addition at the end " alongwith food problems."

8. Addition "Critical studies of Youth Clubs with practical background - case studies."

9. Addition " Problems in running youth clubs and their solution."

III. EXTENSION TEACHING METHODS AND COMMUNICATION PROCESS:

3. The group wanted to know the difference between key points, lesson notes, course outlines, talking points and detailed notes.

7-A. Group wanted to have independent lectures on motivation and attitudes.

18. Addition " Other projectors."

D-8. Addition " How to write a play?"

D- 9. Addition "How to write Puppet Play?"

D-14. Addition "Folder, booklet, leaflet."

D-14(a) Addition " Radio Rural Forum."

E-2(d) Tape recorder. } Addition.
E-2(e) Camera }

IV. RURAL SOCIOLOGY:

10. Addition "Seminar, syndicate, workshop."

11-a. Addition "How to evaluate group discussion?"
11-b. Addition "Meetings, types, techniques and evaluation."

V. AGRICULTURAL ECONOMICS AND FARM PLANNING:

8. Modification 'Sociological' instead of 'Social.'

10 and 11 — There was a suggestion from the group that opportunities for practical exercises should be provided.

12. Addition " Intensive Cattle Development Programme."

VI. GENERAL:

3. Addition " Background Poultry Keeping."

6. Addition "Organizational set-up of Family Planning Programme."

8. Addition "Coordination between officials and non-officials at various levels in Panchayati Raj Institutions."

9. Addition "Tacqavi loans, grants-in-aid and subsidy developmental loans and loaning through Land Development Banks."

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LESSON PLANS

In this course a majority of the participants were Instructors teaching Agricultural Extension. In order to provide them with Lesson Plans pertaining to the topics included in their syllabus, each participant was given a selected portion of the syllabus to prepare Lesson Plans. In this Volume I only such Lesson Plans have been selected that pertain to Agricultural Extension. The remaining Lesson Plans of other subject matter fields have been included in Volume II. In the following pages, fifty Lesson Plans will be found which pertain to the actual syllabus of the Gramsevak Training Centres. The participants who are experienced Instructors have prepared these Lesson Plans in consultation with the members of the teaching staff. Emphasis has been given to add adequate matter to these plans so that they could serve as reference material to the Instructors who have been assigned this subject. In some cases they are very lengthy as the main objective is to help the teacher with a wide area to select from. These plans will, however, have to be amended according to the syllabus of each state.

These should not be taken as final forthe information required for teaching the Gramsevaks. They may be treating as starting points.

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Lesson Plan No: 1

CONCEPT, OBJECTIVES AND PRINCIPLES OF AGRICULTURAL EXTENSION EDUCATION

1. Objectives:

To give the trainees exact knowledge of the meaning, scope, objectives and principles of extension.

2. Aids to be used:-

Black board and chart.

3. Presentation:-

The word extension is being increasingly used in common parlance to denote the approach of the Govt. in solving the problems of the rural community.

The following few definitions will clarify as to what extension stands for.

'Extension is an education and that its purpose is to change the attitude and practices of the people with whom the work is done' Douglas Ensminger.

'We can define extension as the increased dissemination of useful knowledge for improving rural life.' Dr.H.W.Butt.

Extension is a programme and a process of helping people to help themselves, increase their production and to raise their general standard of living'- Douglas Ensminger.

'Extension is a two way channel, it brings scientific information to the village people and also takes the problems of the village people to the scientific institutions for solution. It is a continuous educational process, in which both the learner and teacher contribute and receive - B.Rambhai.

On the basis of these definitions we can define extension as below:-

' The process of carrying new ideas from Research and educational centres and specialists into the minds and actions of the village people is extension'.

' Carrying the problems of the field and the farmers to the Research and educational centres for their solution is another aspect of Extension.' Therefore, it is a two way process.

Extension Education:-

It will be clear from above definitions that the extension great emphasis is laid on educational approach as against coercive approach. The change in behaviour, attitude and skills of the people is to be brought about by democratic and educational means. This primary emphasis on education in

extension has given rise to the phrase, " Extension Education." To differentiate it from the formal class room education, extension education is termed as an informal out of the school education. We may say extension is education in action.

Agriculture Extension Education:-

When the extension is limited to the area of agriculture, we term it as Agriculture Extension Education. This establishes growing emphasis on Agriculture in the Extension Education programme as applied to the rural communities.

Objectives of Extension Education:-

Objectives are expressions of the ends towards which our efforts are directed. It may also be said to mean ' a direction of movement ' i.e. in which direction you wish to go in a given place in respect of any activity, and as Paul Leagans says, 'these objectives should be periodically determined in view of progress and changed conditions.

Fundamental objectives of Extension Education as explained by Mr. M.C. Burritt is " To teach people to determine accurately their own problems, to help them to acquire knowledge and to inspire them to action,' but it must be their own action out of their own knowledge and convictions."

More specifically we may lay down the objectives of Extension Education as below:-

1. To increase the knowledge of farmers in the field of Agriculture and thereby to increase their income.
2. To teach them better way of life, to grow their own food and enjoy it.
3. To help farmers appreciate the village life and increase their knowledge about the whole affairs.
4. To promote social, cultural recreational and spiritual life of village people.
5. To give village people such opportunities that they may develop leadership.
6. To create such atmosphere in the village that the rural people may feel their importance, their minds become creative and they become capable, efficient and self reliant.

Principles of Extension Education:-

Principles are general or fundamental truths which may be used in deciding conduct. Some of the important principles of Extension Education are as below:-

1. Extension education starts from where people are i.e. it should be based on conditions that exist locally (village,

block, district and nation). It can be known through personal contact with and through observance of the environment of the people, the social structures, the values, the economic status, the habits, the traditions and the attitudes. In short it should be based on the analysis of the facts. Streotyped pattern of programme is not workable in all the areas. In short meet the people where they are.

2. Extension programme should be based on the needs and interests of people:-

People are motivated to learn if they can satisfy a basic need through learning. Need or desire may be as below:-

I. Desire for security:-

Economic and social security.

II. Desire for new experience:-

Adventure, new interests, new ideas, new friends and new ways of doing things.

III. Desire for recognition:-

Status, prestige, achievement and being looked upon. Cooperation with the programme opens up the possibility for some individuals to acquire a position to leadership in the village and may add to the prestige of the family, e.g. owing a tractor, orchard, well etc.

The Extension worker's job is to understand basic wants of the people with whom he is working. He should also convert the desirable unfelt needs into the felt needs by motivating the people.

What are the needs of farmers?

1. To be successfully established in farming.
2. For profitable farm production.
3. To achieve social and civic responsibility.
4. To maintain an economic standard of living.
5. To rear and educate children.
6. Finding a congenial social group.

3. The farmers should have clear objectives.

No one can act to the best purpose until he has definitely decided what he wants to do. The subject matter and methods will be according to the end to be achieved.

The subject matter knowledge to be achieved, attitudes to be developed and skills to be acquired will depend on objectives, e.g. the application of fertilizers in paddy may be an objective. In this the educational process will involve:

1. Knowledge to be learned -
All information about utility of fertilizer in a particular field.

ii. Attitudes to be developed -

The feeling that it is profitable to apply fertilizers.

iii. Skills to be developed -

Method of fertilizer application.

4. Involve people at all levels of programme planning:

People should be involved at all levels and all stages for participation from beginning to end is essential for success. It will be education in action.

5. Develop programmes gradually and continuously:-

Change takes time. A change in the thinking, behaviour and actions should take into account the traditions, belief and views. Hence hurrying will not do.

6. Democratic approach:-

Decisions should be arrived at democratically through the participation of all concerned. Plan of action should be decided after discussion and consultation with the people. Any planning should be done by the people for the people. This will give a sense of owning of the programme.

7. In consonance with the culture of people:-

Extension worker should learn the culture of the people with whom he works. Programme should be so oriented that it fits in with the culture of the people concerned.

8. Extension education should use local leaders:-

Contacts are multiplied and more people served by working through local leaders.

9. Use trained specialists in the programme:-

The uptodate technical knowhow is provided by experts.

10. Problem oriented approach in extension programme:-

The aim of Extension Education is to solve the problems of the villagers so as all obstacles are removed in the road of progress. Hence approach should be solving of specific problems. Recognition of problems, to learn how to solve/problems, take decisions and choosing methods is a great educational process which really develops the thinking capacity of the people.

11. Should work with the family as a unit:-

Decisions in villages are mostly family decisions. Hence learning opportunities should be provided to whole family, so that every member performs his role.

Further in Extension Education the unit will not be a village but every family in the village.

12. Extension education should evaluate continously:-

Extension worker should know where they stand, what are pit falls, how to remove them and what points need special attention. Evaluation helps in checking teaching results and leads to needed modifications of methods.

13. Use a variety of learning activities and experiences:-

A number of teaching devices should be used to promote learning as learning involves appropriate activities that engage a maximum number of senses.

14. Extension worker should be professionally competent:

Main abilities of the worker should be on following areas:

i. Knowledge of subject.

ii. Ability to plan.

iii. Human relations.

iv. Ability to organise.

v. Ability to communicate.

15. Programme should be flexible:

Extension programme is people's programme. All people cannot be involved at the same time to start with due to different adopter categories. Hence there should be scope of slight modification based on people's experiences, views, situations and conditions may change, hence there should be scope to amend the programme to suit the prevailing conditions.

4. Summarisation:-

1. Extension education is not a new concept. The process is in vogue since ages.

2. Extension education believes in the capacity of the people to make improvement.

3. Extension education highlights the elements of conversion and acceptance by persuasion rather than pressure and coercion.

4. Extension education raises mental level of the people and thereby strengthens and sustains democracy.

5. Extension education ensures the whole hearted participation of the people which is the genesis of our community Dev. Programme.

5. Checking and understanding:-

1. What is the difference between extension and extension education?

2. What is the necessity of finding out needs of the farmers in Extension programmes?

3. What is meant by helping people, help themselves?

6. References:-

1. Extension in planned social change - by B. Rudramoorthy.

2. Cooperative Extension work - L.D. Kelsey and C.C. Hearne.

3. Guide to Community Development - Douglas Ensminger.

4. Summary records of Nilokheri - 7th special course.

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Lesson Plan No: 2

EXTENSION METHODS, THEIR TYPES, SELECTION AND EFFECTIVENESS WITH RELATION AND DEVELOPMENT WORK

1. Objective:

1. To teach trainees the different Extension methods and their selection.

2. To make them acquainted with use of different Extension Methods.

3. To make them real Extension Worker so that they may extend the programme in the effective use of the methods.

2. Previous background of the lesson taught:-

The trainees know about the concept and philosophy of Extension.

3. Aids to be used:

1. Black board.
2. Flannel strips.
3. Charts.

Methods used:
1. Lecture.
2. Discussion.
3. Questions and answers.

Precautions:

a. Introduction:

Extension is concerned with the two assignments.

1. The dissemenation of useful and practical knowledge relating to agricultural and allied subjects.

2. The practical application of such knowledge in farm and every day situation.

Extension methods must accomplish the certain kind of educational changes in relation with subject matter to be learned. Among these are:-

1. Change in knowledge.
2. Change in skill (Mental moral and physical skills).
3. Change in attitude and behaviour.

Although the above are basic ways in which people can be changed educationally. There are additional kinds of changes that should be considered by Extension worker, these may be :

a. Changes in the interest;
b. Changes in the understanding.

b. Application of New Knowledge:

The extension methods employed by the Extension workers directly influence effectiveness of this effect and understanding of the capabilities and limitation of the available methods essential and to their intelligent selection and use.

We say Extension methods are to the Extension workers what machines wrenches, screw driver, and hammer are to the Mechanic. Therefore what is important is that the extension workers must accurately exercise the judgment in choosing the working tools which are considered appropriate to accomplish the task at hand.

The methods employed in Extension may be classified in serveral ways, for example the office call in which oral communication dominates may also involve the use of written or the visual material prepared for general public distribution or for the use in the meetings. Thus we can broadly mention the different extension methods as follows:-

1. Farm and home visits.
2. General meetings.
3. Group contacts.
4. Method demonstration.
5. Result demonstration.
6. Campaigns.
7. Voluntary and local leadership.
8. Exhibitions and models.
9. Tours and excursions.
10. Literature - leaflets, folders, circular letters and newspapers.
11. Farmer's call.
12. Radio programmes.

Their selection:

If one could really know that the cause and effect relationship involved in changing human behaviour, the Extension methods can easily be made most systematic and less mysterious. As a result these choices of the Extension methods could be made such a way that we could expand up the educational progress immeasurably. Social Scientist in general and psychologist in particular have dealt with this phenominon with increasing insight and success since the beginning of Science of Psychology nearly hundred years ago. Hence the selection and use of the methods in any situation are in part a problem of predicting relationship between selected means and ends.

However, the following points may be kept in view while selecting the methods.

1. They should be useful in getting attention.

2. They should be useful in creating interest.

3. Methods should develop the confidence.
4. Methods useful in creating desire.
5. Methods should ensure action.
6. Methods should be useful in getting the people satisfied.

c. Effectiveness of methods:

Three factors should be considered in evaluating the effectiveness of the various methods employed in the Extension work.

1. The success of the methods in influencing the people to make the desired changes.

2. Amount of the teaching effects expanded on it.

3. Unit of time devoted to particular method.

Teaching may yield much larger returns than corresponding amount of efforts spent on some other methods of teaching. It is possible that the combined effectiveness of two or more methods used to compliment each other may be greater the sum of the effectiveness of the same method when employed independently.

To determine the influence in cost of the method used in Extension teaching with a satisfactory degree of accuracy is difficult. This difficulty is lightened by the informed nature of Extension work and the number of opportunities for learning available to the rural people. A chart may be shown to the student regarding percentage of practices. The following is the effectiveness with relation to the development of work:-

1. It facilitates the transfer of knowledge or a subject-matter.

2. It draws attention and create interest.

3. It inspires the people for action.

The development works aim is to raise the standard of living of the people and with whom the work is done. This involves changes in knowledge, attitudes, behaviour and skills. Such changes are only possible through the effective use of the Extension methods.

4. Summarising and recapitulation:

Extension methods can be classified in several ways according to use or forms as the case may be. But in classification some precautions should be taken. In selection their types and effectiveness should be kept in view.

1. Usefulness getting attention diverted on creation of interest, confidence, desire and propel them to action.

2. Their effectiveness can be measured through different work whether people are convinced or not.

Questions:-

1. Why Extension methods are known by the Extension Workers?

2. How many types are there of the Extension methods?

3. How will you insure the effectiveness of each method?

5. References:-

1. Extension methods and Community Development in India. Department of Agriculture, Mysore. Pages No: 26 to 41.

2. Guide for Village Level Workers, Ministry of Food, Agriculture, Community and Cooperation, Government of India.

3. Extension Teaching Methods.
Extension Service Circular. 495 USA.

4. Extension Workers tools by S. Arjan Singh and Sardar Amrik Singh Nabha.

5. Gram Sevaks Guide for increasing Agricultural Production by Douglas Ensminger. Ministry of C.D., Govt. of India.

6. Assignments:-

Write a note what Extension methods will you use in organising a youth club in a village.

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Lesson Plan No. 3.

EXTENSION METHODS AND THEIR IMPLICATIONS IN EXTENSION WORK

1. Objectives

   1. To acquaint the trainees with the Extension methods.

   2. To make them understand their implications in Extension programme.

2. Previous background

   The trainees have got a background of two years preservice training at GTCs and experience of field work.

3. Aids to be used

   i) Chalk board; (ii) Detailed notes; and (iii) Flannel strips.

4. Presentation

The trainees will be asked to recapitulate their past experience on the subject and the following questions will be asked to find out their level of understanding:

i) What do you understand by Extension methods?
ii) What are its implications in Extension programme?

(If the trainees reply well, then it means their level of understanding is good. They shall be praised for it).

Presentation of the new subject matter.

i) Importance and meaning: (Shall be discussed orally)

a) It helps to bring the technology to the level of understanding of the farmers in their field situation.
b) Education means changes in attitude, behaviour and skills of people. This is possible only through the methods which help in Extension Education. Hence it is an applied source.
c) It helps teaching in such a way that it arranges situations best suited to stimulate and guide the learner in his activity towards fulfilment of a level.

Hence Extension methods are used to create such an atmosphere in which learning can proceed very actively.

ii) Extension methods (Through flannel strips)

They are tools for Extension worker. They are

as follows:

a) Farm and home visits: Direct Method:
Used to get confidence, discuss problems of individuals, teach skills and give certain informations.

b) General meetings:

Effective when we have to contact many people, prepare them or to know their reactions.

c) Group contact:

Used in problem solving and decision making amongst individuals collected together with a common goal.

d) Method demonstration:

To show how to do a thing. It is a quick process and is economical.

e) Result demonstration:

It is used to show the value of a practice. It is time consuming and expensive.

f) Campaigns:

It is an intensive method used for short period to focus the attention of people and stimulate them.

g) Voluntary and local leadership:

Such local leadership is utilized to contact a large number of farmers. Here we have to identify them and then train them according to our needs.

h) Exhibits and models:

In this item of interest are systematically displayed through visuals for creating interest and making them understand the subject.

i) Study tours and sight seeing:

Group goes to see and study an improved practice according to a preplanned programme.

j) Literature:

Books, periodicals, magazines, newspapers and bulletines etc. which give information are circulated among the members.

iii) Implications of Extension methods in Extension Programme (By writing on the blackboard)

a) The rural people do not respond to a programme unless they understand it.

b) Through Extension methods objectives are clarified to them.
c) They gain the necessary skill required to perform their activity.
d) It helps to provide an effective contact with the village masses.
e) It helps the extension workers to educate the farmers with regard to improved practices.
f) It attracts attention and creates awareness in them.
g) It stimulates the village masses for action.
h) It imparts them the necessary skill to prepare for a particular programme.

5. <u>Summarisation and Recapitulation</u>

The trainees will be asked to summarise the salient points given to them.

(The trainees will answer the question. If they give out the salient points, it is alright and if not they will be helped again).

6. <u>Testing and check up</u>

The following questions will be asked to the trainees to check up their understanding:

1. What do you mean by Extension methods?
2. Can you name some important Extension methods?
3. What are its implications in the Extension programme?

7. <u>References:</u>

Extension Education in Community Development.

8. <u>Assignment</u>

Write down an essay on the importance of Extension methods in Extension programme.

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Lesson Plan No.4

GROUP DISCUSSION, METHODS, VARIOUS TYPES, CRITERIA AND SKILL

1. Objectives

   1. To acquaint the trainees with the various group discussion methods.

   2. To make them able to understand the importance of how to organise these methods.

   3. To extend the useful knowledge through these teaching methods.

2. Previous background

   Importance of Extension teaching methods in Extension Education, selection and effectiveness.

3. Aids to be used

   Flash cards on various methods.

4. Presentation

   Introduction.

In Extension teaching methods, apart from others, the group discussion approach has been very useful. These discussions help to understand and clarify their motives resulting in fruitful contributions which help the programme to be adopted.

Presentation of the subject matter.

A. What is the group:

A group is defined as two or more people engaged in interaction with each other in a single face to face meeting and give some reaction to each other. Speech is the basic medium through which interaction takes place.

B. Why is a group:

The existence of group is because each and every member believes that he can fulfil some need or needs in collaboration with other members that he cannot fulfil by himself. So long as fulfilment of the wishes (security, new experience, recognition and response according to the W.I.Thomas) of individuals members is attainable the existence of group is there.

C. What is group method:

Group methods are the techniques which are used in the attainments of the group goals and bring fulfilment

of the wishes of individual members. There techniques provide opportunities to members to make themselves aware of each others opinions and a basis for understanding the wishes in relation to group goal.

Types of group methods.

a) Small group discussion: This is a teaching technique in which face to face mutual interchange of ideas and opinions between membe s of a small group of a large group takes place for greater participation and discussion.

The primary purpose of this technique is to increase interest regarding a desire for information, a problem to be solved or a decision to be made.

Small group discussions techniques may be classified into 3 types:

i)Buzz group method.
ii)Discussion 66 or Philips 66.
iii)Committee method.

In a buzz method, 'two persons' discuss on the many separate asked problems or a particular problem in an informal way for the purpose of facilitating their participation in the total group process. There need be no chairman, but agree on who is to report the results of the discussion. It is called 'Buzz' due to a noise like buzz in the process of discussion by the group members.

In discussion 66 method, 6 persons discuss a subject or problem for six minutes. It is called Philips 66 because it was popularised by J.Donald Philips of Michigan State University.

In a committee method, two to four members of a group are entrusted to go through the various aspects of a problem and then put before the group for final discussion and decision.

b) Large Group discussion: This is the main common type carried on whenever a total of 7 to 20 members gather for discussion as a one unit. This method helps to thrash over ideas as a total group.

In this all members participate to think as a group and develop a sense of equality. On mutual concerns issues and problems it is fruitful.

c) Questions and answer technique: There are ways of using this in the meetings:

1. The leader may introduce the questions and call upon the groupfor answer.
2. The leader may draw questions from the group and the resource persons may answer these questions.

3. The leader may draw questions from the group and then turn the question back to the group for an answer.

4. The leader raises some questions and answers them himself or calls upon a resource person to answer them.

D. Socio-drama or Role playing.

This is a dramatic skit. The participants act out a realistic situation through puppets and one act play. Problems of human relation can be put through this method.

E. The lecture.

In this method a qualified speaker delivers a prepared discourse before a group. It is the most scientific method of diffusing a good deal of information in the short possible time. This method can be used only in such a group whose members are passive listener, whose attention and interests are maintained in a one way communication situation.

F. Symposium.

In a symposium two or more prepared talks, speeches, or lectures are presented by several individuals on the various phases of a single subject problem. A moderator controls time and subject-matter. The talks should be limited to not more than twenty minutes and the total time of the symposium should not exceed one hour.

For a successful symposium the moderator should meet the speakers well in advance to secure agreement on the break down of the subject matter, outline the general areas to be covered by each member.

G. The Panel discussion.

A discussion before an audience by a selected group of persons (usually 3 to 6) under a moderator is called a panel discussion. The panel members question and answer among themselves in a conversational form no speeches by the member or by the moderator should be permitted.

The purpose of a panel discussion is to get important facts and different view points out into the open, stimulate thinking and lay a basis for audience participation.

Selection of problems, panel members interested in the problem and a chairman having respect for a panel and ability to use questions and summarising the discussion is very important.

H. The Interrogator Panel.

In a small group of knowledgeable and individuals (The panel) and one or more other persons (The interrogators) under the direction of a moderator take part. The panel consists of 3 to 5 members and a single interrogator is used to ask questions to them. The inter-change is at the conversational level but the answers are expected to be precise.

It is highly effective method for obtaining specific information on a specific topic from the expert. The interrogator plays an effective role byhis questions and gives directions to the discussion.

I. The interview.

The questioning of an expert on a given subject by an interviewer, who represents the group is called an interview. The expert is usually one from outside the group. The interviewer is usually a member of the group.

J. The forum.

This method is very similar to the symposium in which two or more speakers present talks on the same subject, The subject is controversial and the speaker presents the opposing sides of the questions. Each speaker presents his case to the audience for its consideration.

K. The seminar.

This is a highly evolved form of discussion procedure. Usually it takes 2 to 3 days to thrash out the problem. The procedure followedas below:

1. Preliminary session and getting opinion on the problem by the participants.
2. Dividing the group, assigning the different aspects of the problem.
3. Discussion and decision in the form of report by the group.
4. Joint session and presentation of report of the group by the leader of the group.
5. Final discussion on the report combining the decision in the form of a report for action.

5. Summarising

In the village Extension teaching programme the various group methods like question and answer, technique of interview, large group discussion, socio-drama, the panel discussion will be useful.

6. Reference

1. Leadership and Dynamic group Action by Beal and Bohlen. Part II from Pages 181 to 284.
2. Discussion methods by Garland J.W.V.Part II. Chapter III. Pages 139 to 144.

Lesson Plan No. 5

PLANNING, EXECUTION AND EVALUATION OF GROUP DISCUSSION METHODS

1. Objectivs

    1. To create confidence in the Extension worker.
    2. To make him capable of arranging the discussion.
    3. To enable the extension worker to use evaluation methods.
    4. To create leadership among village level workers.

2. Previous background

Various types of group discussion methods, role and responsbilities of a leader and discussants.

3. Aids to be used

Flannel strips.

4. Presentation

Introduction:

The most important aspect of group discussion is how to plan, execute and how to evaluate group efforts in relation to their goal or problem. Without proper planning, group discussion technique may not be considered and applied effectively.

Presentation of the subject matter:

Planning

Advance planning for any type of group discussion is necessary in the following directions:

a) Selection of the problem -

In agricultural extension programme problem of agricultural issues are very important. It may concern with any intensive cultivation method for any crop, plant protection measure soil conservation work, organization of farmers small saving programme and family planning etc.

The following criteria may be adopted to fix the problem to be acceptable:

i) Is it related to the farmers involved?
ii) Is it dynamic?
iii) Is it compatible with the general aims of the group?
iv) Is it achievable through the resources available to the group?
v) Whether it meets the needs of the people?
vi) Can it be diffused easily with the group?
vii) It is co-operatively accepted.

b) Size and type of group

A group is a body of individuals drawn around co common interest. Such a group should not be more than 20 in number. Here, the group does not mean a cast group, but a group of farmers who are actually involved in a particular decision i.e. a group of farmers interested in intensive cultivation of P.V.18 or small saving programme.

c) Physical arrangement

A comfortable place either in community centre or in school or in panchayat ghar should be selected where every farmer may not hesitate to come.

Circular seating arrangements should be made if possible so that each may see each.

Light (if night) and water facilities may also be made.

A portable blackboard will be useful and wall space for the display of charts, posters and maps is desirable.

To improve the quality of discussion a single session should not be more than 1½ hours will be necessary.

d) Invite the person concerned

The farmers concerned should be informed in advance about the discussion, place and time. Written invitation has been found effective in village farmers.

e) Sources of information:-

An essential condition of profitable discussion is that information, facts or figures should be available before starting the discussion. Without it the group will either wastes its time in idle speculation or will be obliged to solve one disputed question one after another with the result that no conclusion can be reached.

Execution

Execution means the actual discussion on the problem. The first task of a discussion group is to analyse its problem and work out an agenda.

The following four steps will enable a group to execute the agenda and discussion systematically.

a) Exploring the issue

At this phase every member should speak up in rapid succession each stating his view briefly.

b) Taking stock of the situation

Means sorting the ideas presented in 3 groups - those in which there is complete agreement, those on which members are unable to come to any opinion at all due to lack of information and those on which there is a difference of opinion.

c) Resolving conflicts

On such issues where there is difference of opinion, efforts should be made to resolve the conflict by providing the opposing members to put their arrangements before the group.

d) Summarising the discussion

In the end the extension worker should summarise the discussion in brief statement.

Evaluation of procedure

Discussions in meetings can be evaluated through various methods. The purpose of such evaluations is to find out reactions of the members about selected aspects of group thinking, leadership, process or productivity. The following methods can be applied.

a) End of meeting comments & suggestion method

In this method questions are formulated and written on meeting-end-slips to seek the reaction from all group members. The group members need not sign their slips. After collecting the slips members are informed about the summary made. A simple form can be like this:

i) How did you feel about this meeting (check)?
(No good-mediocre-all right-Good-excellent)
ii) What were the strong points?
iii) What were the weaknesses?
iv) What improvements would you suggest for future meetings?

b) Evaluation of content and objectives

Such evaluations are made to measure progress towards its goals and objectives. Individual needs and motivations, responsibility of group members are evaluated.

c) Evaluation of individual contribution

In this the actions of individual members are evaluated according to his role i.e. task role, group building roles and personally centred role like Dominator, Blocker or playboy etc.

d) Group observer method

In this the evaluation is made by a group observed or an observation team. The observer should be accepted freely and easily by the group. He should be capable of verbatising his observations in a simple manner.

e) Sociometry

The use of sociometric technique provides a graphic representation of action and interaction. The resulting diagram is known as sociogram.

This can be used as a means for determining the degree to which individuals are accepted in a group, for discovering the the relationship among the individuals. This does not give "why" answers.

5. Summarising

An extension worker should plan in advance the discussion by finding out problems, selecting the group members, method to be used, material needed, inviting the concerned participants and also the information required at the time of discussion.

As a leader of the discussion he should formulate agenda and proceed accordingly.

He should also find out the reactions of the group members on the discussion and made use of it by putting before them or future guidance.

6. References

1. Leadership and Dynamic group action by Beal & Bohlen Part III - Page 289 to 341.
2. Group thinking and conference leadership by William E.Utterback Chapter II page 15 to 23 and Chapter V Page 44 to 51.
3. Leadership for Action in Rural communities by Burton W.Kreitlow - Page 125 to 128.

Lesson Plan No.6

ROLE AND RESPONSIBILITIES OF LEADER AND DISCUSSANTS IN A DISCUSSION.

1. Objectives :

i) To make aware of the functions of a leader in a discussion.

ii) To acquaint them with the attitudes and behaviours of the discussants.

iii) To create awareness of the problem arising during the discussion.

2. Previous background :

Various types of group discussion methods such as symposium, seminar, large group discussion, Buzz, Session, Huddle 66, Form panel, Debate, opposing panel.

3. Aids to be used:

Chart.
Suspense strips.

4. Presentation of the topic :-

A) Introduction :-

Success of group thinking depends very much upon how effectively the members contribute and how skillfully the leader moderates the discussion.

B) Leader in Agricultural Extension Science :-

In a class room situation the teacher is a leader and students are discussant. In village agricultural extension education programme the Gram-sevak or any extension worker works as a leader and the farmers are discussants or participants. In this light the following roles may be taken up.

C) Presentation of new subject matter :-

Role of a leader:-

Role of a leader can be classified into two main aspects. Before actual discussion and second at the time of actual discussion.

Before actual discussion a leader should make physical facilities necessary for a discussion such as sitting arrangement, choice of surroundings, lighting (if any) etc.

The more critical and difficult role is at the time of actual discussion. The following role is important.

i) Initiating discussion :-

The first task of a leader is to open the discussion and start the conversation. In the opening remark he should accomplish the following purposes.

a) To create a warm and friendly climate.

b) To stimulate interest in the importance of the problem alongwith limitations.

c) Procedure of discussion.

d) To start the members of the group talking together by asking questions.

ii) Occasional summaries :-

The leader should keep the discussion moving in such a manner that the members are clear on every step as to why they have accomplished, where they are and where they are going next. By occasional summaries the discussion may be kept on the right track.

iii) Clock watching :-

A leader should also remind the group members of the amount of time he is spending on a particular point and of necessity for finishing his work by a certain hour.

iv) Keep on the subject :-

Irrelevant discussion, some times, lead the group away from the exact target. It is the duty of a leader to warn and keep them on the subject under discussion.

v) Encourage participation :-

A leader should initiate the members to participate fully, freely and frankly.

vi) Elaborating contributions :-

Some times a number of the group, having an excellant idea cannot verbalise and make understandable to the rest of the group. The leader should illustrate the idea contributed by the members if any.

vii) Seeking opinion and informations :-

Some times some members do not present adequate reasons for their attitude on any point. This create a barrier to fruitful discussion. The leader should over come this by putting questions "why" do you feel that way?"

And some time discussion is toned down due to lack of sufficient information, which certain members can provide. The leader should recognise their help by asking "you are aware of that fact, will you kindly tell us."

viii) Testing the contribution :-

The leader should not believe that every thing, which is said, is worth-while. A leader should ask to validate one's contribution by putting questions "where did you get these facts."

ix) Controlling troublesome role behaviour :-

Every group has one or two members who have the habit of interupting others by several ways. Their trouble some role behaviour not only disrupt, the atmosphere, some trouble some role such as "the dominator" the recognition seeker" the play boy" the aggresion". The withdrawer" and the rationalisation or self deception behaviour should be tackled skillfully by the leader.

x) Pointing out similarities and differences :-

Some time two or more people think in different ways, but the idea is same. The leader should coordinate, synthesize and seek approval from the person concerned.

Similarly, people who have different ideas but the meaning sounds the same. The leader should clarify and get it explained why?

xi) Remain in the back ground :-

A village level worker leading a discussion, should always remain in the background. He should not impose his thinking in advance, but give only direction and technical guidance where necessary.

xii) Resolving conflict :-

There are differences of opinion which needs progress and agreement between the members. The members should bring those members to present their supporting reasons step by step. This mutual criticism may be fruitful and the conflict may resolve.

xiii) Taking notes :-

The leader should jot down in a word or two each of the point so that in concluding the discussion nothing is left.

xiv.) Concluding the discussion:

The leader's duty is to bring the discussion to a satisfactory close. He should point out what has been agreed upon, what has been accomplished, when there are disagreement, what remains confused and unresolved and what needs further discussion.

xv.) Thanks to the members:

As a leader, the Gramsevak should thank the farmers or the members for the contributions and time devoted.

B. Role of the discussants:

For smooth and effective running of the discussion the participants or the farmers taking part in the discussion should bear some responsibilities also.

The knowledge of the subject matter under discussion, a quick mind, sound judgment are important but the attitudes and their discussion habits are the main thing to be considered.

a. Attitudes:/

1. Friendliness and courtesy:

Each member towards his colleagues should be friendly and courteous. Temper should not be lost to any one.

2. Open mindedness:-

Every member should be clear with each and sympathetic attitude towards each.

3. Inquirer:-

Attitudes of each member should be an inquirer than of the advocate. Enquiry should lead the members to change their mind towards stickness.

4. Liverly:-

This attitude comes only when each member has interest to co-operate actively in the search for a solution to the entire group.

5. Sympathetic attitudes:

It means, each member should show hospitality to new ideas and keen interest shown by any participants.

B. Discussion Habits:-

Certain habits of thoughts and speech lead to group discussion such as:

1. Speak up:

The members of the group must so to speak, think around so that others may know what is going on in his mind. He should also give his reactions on the others ideas.

2. Don't interrup:

Members should not distrub each other.

3. Follow the ball:

Discussion is like a rolling ball. Members should not only give his self expression on a particular time but present his ideas immediately comes in his mind and follow through the discussion.

4. Be brief:

T he discussants should present their views in brief rather than long statements.

5. Avoiding name calling words:

Name calling words and other languages that arouse unnecessary opposition should be avoided by the members.

Beal and Bohlen in the book-Readership and Dynamic Group Action has stated the role of members in three catagories:-

a. Taskrole: Initiator, opinion seeker, opinion giver, Information seeker, Information giver, Elaborator, Evaluator Critic, summariser, recorder, integrator, orientator, procedural.

b. Group Building role: Encourager, hormoniser, Standard setter, Energizer, follower and evaluator.

c. Personally centred role:- Dominator, Blocker, anecdoter, playboy, special interest pleader, recognition seeker.

5. Summarising:

For a fruitful discussion in the village Agricultural Extension programme a village level worker or an extension worker should lead the discussion by making physical arrangements, initiating, summarising, initiating participation, clarifying and guiding the farmers.

The farmers should also behave with each other in sympathetic attitudes towards finding out solution on the problem under discussion.

6. Testing and Check-up.

1. Which role of a leader do you feel move unavoiding in smooth running of a discussion.

2. How far do you agree that the discussion habits promote healthy atmosphere in a discussion.

7. References:

i. Group leadership and Democratic Action by Franklyns S, Haiman-Chapter 4, Page 84 to 88 and Chapter 8, Page 166 to 174.

ii. Group thinking and conference leadership by William E.Utterback-Chapter VI-Page 52 to 56 and Chapter VII page 57 to 83.

iii. Leadership and Dynamic Group Action by Beal and Bohlen Part I.

iv. Leadership for Action in Rural Communities by Burton W. Kreitlow Part II, Chapter VII, page 128 to 132.

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Lesson Plan No:7

MEETINGS - DEFINITION - IMPORTANCE AND TYPES.

1. Objectives:-

1. To acquaint the trainees with the idea of what a meeting is and what is its importance?
2. To make them understand regarding the types of meeting.

2. Previous background:-

The trainees have already undergone 2 year pre-service training at GTC and they have got field experience.

3. Materials used:

1. Chalk board.
2. Detailed notes.
3. Flannel strips.

4. Presentation of the topic:

A. Introduction:-

The trainees will be asked to narrate their experiences on the subject and the following questions will be asked to find out their level of understanding.

1. What do you understand by a meeting?
2. Why meetings are important in our extension programme?
3. How many types of meeting do you know?

B. Definition:-

Meeting is an organised effort to collect people to act together in an organised way towards the solution of their problems or deciding ways and means towards achieving certain objectives.

C. Importance of meeting:-

1. Meetings are important because it is a process of communication of the ideas to a group in such a way that the group feels well informed about it.
2. It helps in selecting and identifying leaders in a group.
3. It promotes understanding of the people, their needs, relationships, characteristics of group

life and requirements also.

4. It creates ability to identify problems and create an atmosphere of common endevour.

5. It promotes democratic process.

6. It develops cooperative skill in the members and integrates their interest and activities.

7. It helps in programme planning.

8. It helps to evaluate the programme done.

9. It develops intelligence, competence and self-confidence in the members.

10. It serves as a media of transferring technical and expert knowledge of the subject-matter.

11. It helps to motivate people towards achieving their goal.

12. It helps to remove the social barriers of the society.

D. Types of meetings:-

Meetings are generally of the following types:-

1. Meetings of some temporary purpose or community meetings;

Such meetings consist of generally mixed audience both in age and sex.

2. Organisational meetings:- e.g. Annual meeting of any organisation. These meetings are conducted according to the constitution and bye-laws.

3. Training meetings:-

These meetings are designed for specific groups to the respective skills in a part either job, which is selected in consultation with the members.

4. Special interest meetings:-

Such meetings enable the person to discuss a selected subject in the mixed group.

5. Planning meetings:

It requires the preparatory work done by specialists and extension workers. The bulk of material presented as 'situation date' and 'outlook' comes from trained workers.

6. Demonstration:-

These meetings are arranged to demonstrate a particular practice or show some results to the group.

5. Summarisation:-

The trainees will be asked to repeat the salient points of the subject taught.

6. Testing and check-up.

The following questions will be asked to the trainees to find out the level of understanding.

1. What do you mean by a meeting?
2. Why meetings are important?
3. What are the types of the meetings?

7. References:-

1. Cooperative Extension work by Calsey and Herrne Pages 405-409

2. New ways to better meetings by Best and Frances Str quess.

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LESSON PLAN No: 8

TECHNIQUE OF HOLDING MEETING AND ITS EVALUATION

1. Objectives:

1. To acquaint the trainees with the technique of holding a successful meeting.

2. To make them understand the process of evaluation of the meeting.

2. Previous background:

The trainees have already undergone 2 years pre-service training at G.T.C. and they have got field experience as well.

3. Aids to be used:

1. Board and chalk. 2. Detailed notes. 3. Flannel strips.

4. Presentation of the topic:

Introduction: -

The trainees will be asked to recapitulate their past experiences and best procedures they had been following.

The following question will be put to them:

1. Have you received any guidance so far in this subject?

2. Have you read any literature over it?

3. What are the techniques of holding a meeting?

Importance:

It is important because it is a process of communication of the ideas to a group in such a way that the group feels well informed about its problems in the society. It is an art of enlisting the cooperation of the people in problem solving and decision making. It is also important because it holds interest attention and presents clear idea.

Planning of the meeting - objectives:

A meeting should always be called with specific objective which should be related to the desired need of the audience by group contact.

ii. Knowledge about the audience:

The organiser should find out the facts about the group behaviour and interpersonal relationship, their traditions,

living conditions, felt needs and local problems by group contact, contact with leaders and personal observations at the time of fairs and festivals and other activities.

iii) Time, place and date:

This should be fixed up at the convenience of the persons required to attend the meeting in consultation with managing body.

iv) Chalking out the agenda:

The Secretary in consultation with the chairman should chalk out the items of agenda and get it circulated well in advance in consultation with the Chairman.

v) The Guest-speakers and resources persons:

If thought proper, to throw sufficient light by technical experts, such persons should be invited e.g. progressive farmers and other important persons.

vi) Physical facilities:

The seating arrangement should provide proper accomodation for all members in a befitting way. The light should be adequate. There should be no distraction and disturbance in the nearby places of the meeting place.

vii) Records:

All relevant records pertaining to the previous meeting and to the items of the proposed meeting should be kept in readiness for reference.

viii) Chalking out the programme:

A suitable programme regarding the order of presentation of the subject-matter of the agenda should be chalked out by the Secretary in consultation with the Chairman.

Procedure of meeting:

i) The chairman should be a respectable and responsible person. His election may be done by calling for nominations from the floor. This proposal should be seconded also. In case many names are proposed then it will be decided by majority votes.

ii) The chairman should run the meeting according to the programme.

iii) The secretary should read the minutes and the chairman should ask for its approval from the house, after which other items of agenda should be discussed and proceedings noted down. In case of division the president should decide it by majority of vote.

iv) Many member who wants to speak should address the chairman first and get himself recognised by him. In ordinary meetings the chairman orders for the business atonce but in organisational

meetings the proceedings fallow according to the agenda.

v) Business is done by offering motions by the members in 4 steps.

a. Offering the motion:-

He rises, gets himself recognised by the chairman who allows him to move the motion. It should be seconded also.

b. Putting the motion before the group for action:

This is done by the chairman. No motion is before the Assembly unless stated by the chairman.

c. Taking a vote by raising hand or by rising on own seat or by yes or no:

The chairman should call for the negative votes also. A member can call for revoting and recounting. Chairman can only vote in case of breaking a tie.

d. Voting is not final unless announced by the chairman.

Constitution and by-laws:

In organisational meetings they are necessary to define the activities, membership, directions and financial features etc. It is a document which is very important.

Attendence:-

The secretary should get the signatures of the members present on the register prescribed. The chairman should introduce the speakers, act as toast master, he should arrange presentation and reception of gifts, conduct meeting and discussions, speaking contests and keep the coordination of the objectives above, also regulate the time and intensity of discussions.

Method of presentation of subject-matter:

1. The speaker must be courteous and should show good taste.
2. He should be fluent in his speech with clear voice and good man neriom.
3. He should speak a simple, understandable and correct language. The local language is best suited.
4. He should welcome questions after his speech and should keep a command on his temper and answer the questions in a democratic way.
5. Do not start any speech with an apology.
6. Deliver a complete idea of the topic.
7. Speak with ease and confidence and directly to the members.
8. Stand in an errect easy position, balancing in an alert elastic and graceful manner.
9. Use visual aids, if necessary, but avoid using too much of them to avoid distraction.
10. Give only the correct informations.
11. Summary and recapatulation of the subject should also be done.

Evaluation:

Question and answer method:

i) Questions are prepared relating to the subject and written slips bearing these questions are circulated to the members for answering them. Reactions are studied and comments prepared.

ii) Quiz form in which they reply the question by saying yes or no.

iii) Question and answers to group members by asking question on salient points and asking some members to summarise these subjects.

iv) By appointing observers:

They keep a watch on the proceedings and in the end they give out their study reports.

v) Sociometeric methods:

By tables and biographical methods e.g. by sociogram, it is found out what is the group relationship and their reaction to a particular situation.

5. Summarisation:

The trainees will be asked to summarise the subject points of the topic taught.

6. Testing and check-up:

The following question will be asked to the trainees.

1. What do you mean by planning a meeting?
2. What is the procedure of holding a meeting?
3. How will you table a motion?

7. References:

1. Cooperative Extension Work by Calsey and Hearne.
2. New ways and better meetings by Bert and Frances Strauss.

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Lesson Plan No: 9

RESULT DEMONSTRATION

1. Objectives.

1. To give the V.L.W. trainees the working knowledge of the Result Demonstration as one of the effective method of Extension.

2. To improve the skill of V.L.W. in adopting the media as an Extension techniques for expanding Agriculture Programme in the field.

3. To build confidence in the VLW trainees as extension workers.

2. Previous background:-

An extension worker teaches the rural people and for this an extension worker uses different methods of extension teaching that is :-

i. Individual contact - Result Demonstration etc.

ii. Group contact - Method demonstrations etc.

iii. Mass contact - Radio, Mass Meetings etc.
We have already discussed the concept of extension and the different methods in extension teaching.

3. Aids to be used:-

1. Black board.
2. Flannel strips.
3. Chart.
4. Slides and film strips.

4. Presentation:-

A. Introduction: Method (Talk) Aids

Extension is a continous educational process, the object of which is to bring about a change in the attitudes, knowledge and skills of the people. There are several methods of approaching a villager, for an extension worker. Some methods are more effective than others. Demonstration is an effective means of communicating new ideas and practices. It involves seeing, hearing and doing. It is an interesting and convincing way for people to accept new ideas or practices. Therefore as an extension worker you should know, how to conduct a successful result demonstration for making Agriculture Programme successful in the field. By following quotation the importance of doing in class is evident.

People remember:
Only 10% of what they hear,
only 20% of what they see and
only 70% of what they do.

B. Subject-matter   Talk and Black board.

1. Definition of result demonstration:-

A result demonstration is a method of teaching, designed to show by example the practical application of an established fact or group of related facts. It is concerned with proving the worth of a new practice. The demonstrations, where we demonstrate the effect of the use of the techniques are called result demonstration.

In other words result demonstration is a way of showing people the value of a recommended practice. It is used to establish the superiority of one practice over the other.

A result demonstrations, thus, is a method of teaching people the value of an improved practice. The teaching is done by showing them the results of the improved and unimproved local practices, so that, they may see and judge for themselves and by this establishes confidence amongest farmers. A result demonstration must be done under the direct supervision of the extension worker. It must be seen by the people. The extension worker must help to keep the records.

2. Why a result demonstrations? Objective are as follows:-

a. To prove the work of a new practice over an old prevailing local practice or practices.

b. To show that the recommendations are locally applicable and are profitable.

c. To build confidence on the part of both extension worker and the farmer as well.

d. To convince the cultivators or people about the result of a new practice when they are afraid of taking risk.

e. To learn by doing on the field and believing by seeing.

3. Advantages of a result demonstration:

i. Helps in introducing a beneficial new practice. Seeing is believing.

ii. Increases confidence of farmers in Extension and the recommendations of the extension worker.

iii. It creates confidence in Extension worker to be practical.

iv. Provides factual data of cost and other informations.

v. Develops local leadership.

vi. Stimulates more interest.

4. For what jobs? It is applicable to jobs such as:

1. Use of improved Agriculture practices.
2. Use of improved seed.
3. Use of improved agricultural implements.
4. Fertilizer application.
5. Use of composting and Green - manuring.
6. Plant protection measures.
7. Better cattle feeds.
8. Castration of scrub bulls.
9. Artificial inseminations in Animals.
10. Irrigational facilities.

5. Difference between a result and method demonstration:

Method demonstration	Result demonstration
1. Teaches skill or method of doing a job.	1. It establishes the work of a practice over a local one.
2. It benefits only those who are present.	2. It benefits others also.
3. It takes less time - only time duration of meeting.	3. It takes longer time. (weeks, months or years).
4. It shows recommended practice, applicable in local situation.	4. It establishes the practice is not only practicable but also profitable.
5. There is no obvious element of comparison.	5. There is comparison.
6. Can be conducted in artificial situations?	6. But will be conducted in real situation only.

6. How to conduct a successful result demonstration?

The different steps involved in result demonstration can be grouped into four.

a. Planning and preparation.
b. Extension or conducting of the result demonstrations.
c. Follow-up.
d. Evaluation.

a. Planning and preparation of result demonstrations:

1. Selection of right practices, need be demonstrated.

2. State objectives - Clearly and specifically.

Discuss with the people for finding out their interest in the practice.

3. Collection of information on the subject from existing literature and records by consulting subject-matter specialists.

4. Selection of the demonstrator:- He should be:-

i. A local person in whom community has confidence.

ii. Conscious of his responsibility.

iii. He must command the respect of the community.

iv. Willing to undertake the result demonstration.

v. Be friendly.

vi. Public spirited.

vii. Of cooperative nature.

viii. Progressive nature.

ix. Energetic.

x. Able to keep record of facts.

xi. Able to secure all types of implements, material required. for demonstration.

5. Locate sources of material required.
6. Reduce plan to writing.
7. Discuss and plan with the selected farmers.
8. Announce widely.

9. Locations:

i. The demonstration should be located in a community where there is a problem.

ii. Easy to reach for the majority of the people.

iii. A farm selected, should be as nearly, typical of the community as possible. Some of the conditions in selecting a typical farm are soil fertility, level, degree of erosion, soil type, drainage, equipment, kind, number and quality of live-stock, home stead, financial background and other pertinent facts.

b. Extension or conducting the result demonstration:

i. Check the plan.
ii. Get all the materials ready.
iii. Start the demonstration in the presence of the villagers.
iv. Proceed step by step and emphasise key points.
v. Inove the group.
vi. Mark demonstration plots with large sizes if it is a field demonstration.

vii. Assist the farmer, on whose field the demonstrations is conducted, in keeping proper records.

viii. Make a calendar of operations.

ix. Visit the demonstration site regularly for supervision and guidance.

x. Give publicity to the demonstration.

xi. Conduct tours to successful demonstrations at proper times.

xii. Summarise records. Analyse and interpret data in terms of farm practices.

xiii. Harvest and weighed the yield.

xiv. Report results of demonstrations through all media of communication.

xv. In cases of failure, analyse the causes of the failure,

xvi. Have the demonstrator's report at meetings etc.

xvii. Keep economics of the result demonstrations in record for future utilization.

xviii. Enlist other farmers to adopt the new practice.

c. Follow-up.

The demonstrator should follow-up the demonstrations at different stages as follows:-

1. Periodical visits by demonstrator with the farmers.
2. Field trips or tours once or twice in crop season.
3. Results of successful demonstrations be published in local news-papers and local magazines for giving wide publicity.

d. Evaluation:- on the following points:-

i. Objective.
ii. Procedure;
iii. Finished product or yield.
iv. Interest created and
v. Over-all results.

Limitations of result demonstrations:-

a. Finding a suitable farmer willing to keep records is often difficult.

b. Results may be effected by uncontrollable factors like weather or natural calmity.

c. An unsuccessful demonstration may create strong unfavourable conditions for other extension activities.

d. Requires elaborate and thorough preparation. Its cost is very high.

e. Requires large amount of Extension worker's time.
f. Creates rivalries sometimes.
g. It is not suitable for all recommended practices.

Conclusion:-

A carefully conducted result demonstration is the most convincing proof of the superiority of an innovation and bringing about confidence among the farmers to adopt the new practices in preference to their own. It is a very effective educational tool and should form the basis of Agricultural improvement in a village.

Testing and check-up:-

The following questions be put to trainees:-

a. What is a result demonstration?

b. How will you select a farmer?

c. How will you select a plot?

d. What is the importance of maintaining records in a result demonstrations?
f. What are the advantages of a result demonstrations?

References:-

1. Extension Teaching Method - by Meredith S. Wilson and Gladys Gathe Pages 40 to 43.

2. A hand book on Extension for Extension workers. Extension Advisors, Kerrle, Pages 61-65.

3. A guide to Community Development - by Douglas Basimeer (Revised) M.C.D.C. Govt. of India.

4. Coop. Extension work - by L.D. Kelsey and G.C. Hearne. Pages - 394-397.

5. Village Level Workers: Their work and Result. Demonstrations:- by D.C. Dulley, Dr. W.K. Sutton, Dr. G.Gallup - pages 123-131.

Assignment:-

In the next class the group discussion method of teaching will be taught and the trainees are required to come prepared on that. Bring one plan of result demonstration when you go for villages.

Lesson Plan No. 10

METHOD DEMONSTRATION

1. Objectives

    1. To give the Village Level Workers the knowledge of the Method Demonstration.

    2. To improve the skill of VLWs in adopting the media as an Extension technique.

    3. To equip the VLWs to adopt this technique effectively in the villages.

2. Previous background

Knowledge of individual group mass approval and its importance as media for Extension of Agriculture Programme. Demonstration is one of the best tools with the Extension worker. A good demonstration creates confidence of the people in the Extension worker and the Extension worker himself becomes confident of his capacities to work. The demonstrations are of different kinds as given below:

1. Method Demonstration.
2. Result Demonstration.
3. Composite (combined) Demonstration.
4. Package Demonstration.
5. National Demonstration.

3. Aids to be used

a) Flannel graph.
b) Blackboard
c) Chart
d) Slide Projector.

4. Presentation

Subject	Method
Introduction.	
There are many methods for the Extension worker about which we are going to discuss. Relative adnantage of a particular method is that it should arouse interest, attract people etc. For better results the Extension worker may use a consideration of two or many. We have to discuss as to what is a Method Demonstration and why it is shown.	Talk.
What is Method Demonstration.	
Seeing is believing. What we hear, we may forget, what we see, may	Talk Blackboard.

doubt, what we see, hear and do, we accept". The following proverb confines the above statement, which goes as:

If I hear, I doubt
If I see, I believe
If I do, I know.

Method Demonstration thus, is one other effective means of communication.

Dr. Leagons defined Method Demonstration as an effective means of communication. It is a show to do device. "A Method Demonstration is designed to improve, an old skill, introduce a new job."

Dr. Ensiminger defined it as "Showing others how to improve something which they are now doing or teaching them how to do something new is a method demonstration".

Method demonstration, thus, is a process of showing the practice by actually doing and telling how to do. It is done to improve the old skill or teaching a new skill through seeing, hearing and doing processes through which:

The learner watches (Seeing)
The learner listens (Hearing)
The learner is given an opportunity to do (doing).

Why Method Demonstration?

The mind should guide the hands successfully, which can least be done by practicing. Theoretical knowledge plays only a guiding role. This can be illustrated by the common saying: Talk.

"An ounce of practical knowledge is worth more than a pound of theory". Blackboard.

a) It teaches skill effectively.
b) It motivates and stimulates action because seeing, hearing, discussion and doing are employed.
c) It provides opportunity for developing leadership.
d) It builts confidence in the demonstration.
e) It promotes personal acquaintance between demonstrator and people.
f) It serves as news-creating agency and therefore stimulates publicity.
g) It yields a high rate of "takes" to exposures.
h) It accomplishes changes in practice at low cast.

Steps in method demonstration. Chart.

A. Planning:

i) Make sure the topic is based on the need of the people-state objectives clearly.

ii) All information available collected and studied.

iii) Step by step outlining the mode of what is to be taught and how it is to be taught.

iv) Points to be emphasised.

v) All equipment and material required to be listed.

vi) All equipment and material collected in time.

vii) All visual aids and illustrative material planned and kept ready for use.

viii) Good publicity, of time, date, place of method demonstration.

The main advantages of Planning are:

a) Clear idea of sequence of different items is developed.
b) It helps in collecting the required material, equipment and literature.
c) It helps in making the presentation of subject matter easy.

B. Rehearsal.

It is very essential to practice the demonstration a day or two earlier so as to:

i) Check up equipment before use.
ii) Find out short comings for improvement.
iii) Gain self-confidence by the Demonstrator.
iv) Check up the time-coverage of demonstration.
v) Look for answers and solution about the probable questions and problems in advance.

C. Demonstration itself.

This is the most important phase, where actual doing is involved. Slides-show

i) Arrangement of the group, everybody sees and hears you.
ii) Bring cultivators or learners closer to Demonstrator by mixing with them.
iii) Tell the objective clearly.

iv) Arrangement of material and equipment at hand.
v) Show each step slowly, step by step with precautions to be kept in mind.
vi) Use of simple and local words.
vii) Ask question for testing understanding of the people.
viii) The cultivator should be involved and given practice to learn the new job.
ix) Distribution of material or literature of any to learners.
x) The attitude and the approach of the Demonstrator should be democratic and encouraging.
xi) After finishing the demonstration in time a summary of what has been done, should be given with thanks.
xii) Clear the doubts.

D. Follow-up.

Without having a proper follow-up there is no value of demonstration. For follow-up the following is to be done: Talk.

i) Personal visits to the people who participated in the Method demonstration.
ii) The future plans to be discussed in follow-up.
iii) Arrangements of supplies in some areas.
iv) To make records.

E. Evaluation.

It is very necessary to find out whether the people agree with the objective, whether the practice has created an interest in the cultivator. Whether they have adopted it or not. Talk Discussion.

Limitations.

Limitation or week points of Method Demonstration are as follows:

a) Not adopted to all types of subject matter.
b) Effectiveness is dependent upon demonstrator's skill.
c) A poorly done demonstration may be confusing for the audience.
d) If people seeing demonstration do not have same equipment, demonstration may fail to join.
e) Takes time for preliminary preparation.
f) If large audience- many may not be able to see clearly. Not suitable for a big group.
g) May cause a set back to the whole programme if not properly demonstrated.

Method demonstration can be shown on the following programme:

1. Ploughing a field by soil testing plough.
2. Sowing hwheat in lines.

Discussion blackboard.

3. Treatment of wheat seed with Agrosin.
4. J.M.P.C.
5. Diboling.
6. Soap making.
7. Handling of flannel graph.
8. Compost making.
9. Use of Paddy Weeder.
10. How to take soil sample etc.

Recapitualation.

The following questions should be talk asked for recapitulation:

1. Why is a Method Demonstration important?
2. What are the points to be kept in mind while presenting a Method Demonstration?

5. References

1. Gramsevaks guide for increasing Agricultural Production by Douglas Ensminger.

2. Extension Teaching Methods by M.C. Wilsm and Gallup (43-45).

3. I.C.A.R- Bulletin Guide for Village Worker Pages 10-13.

4. Extension Education in Community Development by M.C. Der C. Pages 213-214.

6. Assignment

Please prepare an outline for the Method Demonstration you want to take up in the village work during your village stay and give your requirements for the same.

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Lesson Plan No. 11

PROBLEM OF FOOD SHORTAGE, ANNUAL AGRICULTURAL PRODUCTION, GROWTH OF POPULATION AND VOLUME OF IMPORTS.

Objectives :

i) To acquaint the trainees about the food problem and the annual agriculture production of India.

ii) To discuss the growth of population in recent years and its effect on the food problem.

iii) To impart the knowledge regarding food grain imports.

Previous background :

The problem of food shortage has been discussed in the previous class in respect to the small and scattered holding, lack of irrigation facilities, seed, fertilizer and manure, marketing etc.

Aids to be used : Chart and graph.

Presentation :-

India is facing critical food problem although 70% of the total population is engaged in agriculture production. Agriculture is not only the source of livelihood, but also the source of economic prosperity of the country. About 50% of the national income comes from agriculture.

It is rather very unfortunate that inspite of a big population engaged in agriculture, self sufficiency in food has not been attained as yet. There are countries where less people are engaged but they produce so much of food grain that they not only meet their own food requirement but also export to other countries. The table given below will give a view of this fact.

Sr. No.	Name of country.	People engaged in Agriculture.	Income per person/year.
1.	India	70.6	330
2.	Japan	48.4	934
3.	Denmark	25.1	3651
4.	U.S.A.	6.0	8787
5.	U.K.	5.4	4057

Annual food production :-

There have been ups and down in the food grain production due to natural calamity like draught, floods etc. The position of the food grain prouuction is as below :-

Year	Production (Million tons)	Variation on proceeding year. percent.
1960-61	82.02	-
1961-62	82.71	(+) 0.8
1962-63	80.15	(-) 3.1
1963-64	80.64	(+) 0.6
1964-65	89.00	(+)10.6
1965-66	72.03	(-)19.1
1966-67	74.23	(+) 3.1
1967-68	95.59	(+)28.8

In accordance with the draft outline of the Fourth Plan, the Planning commission estimated the food grain requirements to 120 million tons.

Population growth :-

The population of India is increasing so rapidly that it has been termed as population explosion. The below table will give the annual growth of population.

Year	Population
1951	36.1
1961	43.9
1968	52.5

The rate of growth of population :-

The population is increasing at the rate of 2.5% per annum. The rate is so high that it is estimated that the population will be 1000 million people in 1994. In every 1½ second a baby is born in India and thus in a year 21 million persons are added.

The rate of growth of population is as below:-

1650-1750	0.3% a year.
1750-1850	0.5% a year.
1850-1950	0.8% a year.
1950-1960	1.6% to 1.9%
1966-1968	2.5%

The obvious reason for the addition of this population is the fall of death rate. Many diseases which were previously fatal are now curable. The birth and death rates are as below:-

Year	Birth rate	Death rate
1921	49.2	48.6
1931	46.4	38.3
1941	45.2	31.2
1951	39.9	27.4
1961	22.8	21.7
1966	41.0	16.0

For every 15 million of people added the following additional resources are required.

1. Food 12,86,000 quintals.
2. New jobs. 41,00,000
3. Cloth 1,93,499 metres.
4. Homes 25,70,000
5. School 1,29,600
6. Teacher 3,81,800

Volume of imports :-

The rate of growth of population has exceeded the annual food grain increase there by leaving no alternative but food grain import.

The import of food grains during the past years was as below:-

Year	Import in million tons.
1961	3.5
1962	3.6
1963	4.6
1964	6.3
1965	7.4
1966	10.3
1967	10.0

India has to spend crore of rupees in the import of food grain.

Need to accelerate the food production :-

It is, therefore, very necessary to accelerate the food production to face the above situation. In short the agricultural production may be increased due to the following reasons:-

i) To feed the additional population.

ii) To be self sufficient in food and thereby stop drainage of our money abroad.

Summarisation :

In short the problem of scarcity can be summarised as below:-

i) The rate of growth of population increase is 2.10%

ii) The annual production is not sufficient to meet the food requirement of the people.

iii) The import is very voluminous.

Testing and check up :

i) What will be the requirement of food in 1971?

ii) What do you understand by population explosion?

Reference:

India 1966. page 220 to 224

India 1967. page 208 to 212

Yojna September 1968. page 36,45,15

Assignment:

What are ways to solve the food problem?

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Lesson Plan No: 12.

FACTORS RESPONSIBLE FOR FOOD SHORTAGE - LAND HOLDING, SOIL, IRRIGATION, LIVESTOCK AND MARKETING.

1. Objectives:

To make aware of the cause of food shortage in India to the VLWs.

2. Teaching aids to be used:

Flannel strip and chart.

3. Presentation:

Introduction:-

India is an agricultural country. 70% of the total population is engaged in Agriculture. But it is unfortunate that self sufficiency in food has not been attained as yet. The source of prosperity to the nation depends on the Agricultural development. The food shortage is so critical that in 1967-68, 10 million tonnes of foodgrains were imported from other countries. It is very necessary to analyse the causes of the food shortage and low production in Agriculture.

Causes of food shortage:-

1. Small holdings:- The sub-division and fragmentation of holdings have made agriculture an unprofitable industry in India.

The pressure of population on the soil and inheritance laws have resulted in splitting up of a large portion of the cultivated lands into holdings which fail to conform to any economic standard. The holdings are fragmented into a number of plots; often scattered over different parts of the village.

Sub-division of land occurs as a result of sharing of ancestral landed properties among the successors in accordance with law of inheritance.

The size of holdings in different stages of India is as below:-

Stages:	Size of holding:
Maharashtra and Gujarat.	13.3. acres.
Punjab.	10.0 "
Mysore.	6.2 "
Orrissa.	4.9 "
Assam.	4.8 "
Madras.	4.5 "
W.Bengal.	4.3 "
U.P.	2.5 "

The sub-division of land reduced the individual to a very adverse situation. The position of individual holding according

to Agricultural Labour Reforms Committee of Government of India is as below:-

Acre.	Percentage of :
Less than 1 acre.	17%
1 to 2½ acres.	21%
2½ to 5 acre.	21%
Above 5 acres.	21%

Disadvantages of sub-division and fragmentation:-

1. The disadvantages due to the fragmentation of land are the following:-

1. It is difficult to use modern scientific implements.
2. Proper management is not possible.
3. No permanent improvement of the land is possible.
4. Labour and money are wasted.
5. Irrigation facilities can not be well arranged.
6. Time is wasted unnecessarily.
7. It is difficult to look-after the crop.
8. Production is less and income goes down.

2. Soil:-

The deterioration of the fertility of soil is taking place due to the following reasons:-

1. The fertility is diminishing due to long ploughing and taking production.
2. Soil fertility is not being replaced by the farmers and hence the fertility is reducing which is affecting the yield of the crop.
3. The cow dung is not being used for composting and hence the composts are lost to the soil.
4. Soil erosion due to wind, water or heavy rain or flood water.
5. Rise of soils water tables and formation of salt efflorescenc on the surface of soil.

Irrigation:-

Uptil now only 18% of area in India has the irrigation facilities. Indian farmers too much depend on the moonsoon rains for cultivation due to the lack of rains for cultivation and lack of irrigation facilities. Often there is heavy rainfall which brings condition of flood and often there is little rainfall and another situation of draught takes place.

Lack of irrigation facilities hampers in adopting new improved agricultural practices as well as the application of fertilizers.

The canals and tubewells are not sufficient to meet the irrigation problems and individual tube-wells are also desired.

Livestock:-

The livestock population of India is 203 millions out of which 155 millions are cattles. A considerable amount of feed is consumed. Moreover, they are of poor quality and not of improved breeds. Hence they are burden to cultivators.

Marketing:-

There is no market in the rural areas and the cultivators sell his crops for a very low price. He does not get full price and the Mahajan takes the full benefit who store the foodgrains.

4. Summarisation and recapitulation: -

In short, the reasons for the food shortage in India are due to the small holdings, scattered fields, deterioration of sowing, lack of information, livestock and lack of marketing facilities.

5. Testing and Check-up.

1. What are the disadvantages of small holding and scattered fields?
2. How the fertility of soil is deteriorating? What are its effects?
3. What are the causes of food shortages in India?

6. Assignments:-

What are the causes of food shortage in India?

7. References:-

1. The Indian Rural Problems. By Sh. ManiLal B.Navawati and J.J. Anjaria. Chapter III and IX.

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Lesson Plan No. 13.

FACTORS RESPONSIBLE FOR FOOD SHORTAGE, SEED FERTILIZER AND MANURES ETC.

1. Objectives :

i) To make aware about the causes of food shortage due to unimproved seeds.

ii) To impart the knowledge about the loss of the fertilizer of land and necessity to use manures and fertilizers.

2. Previous background :

In the last period, the problem of food shortage was discussed in respect of small and scattered holdings lack of irrigation facilities and marketing.

3. Aids to be used :

Chart and flannel strip.

4. Presentation :

In India 70% of the total population is engaged in the Agricultural production but still the production of food is low. The main factor is the lack of knowledge about the latest scientific ideas in the field of agriculture. The production in different crops are so low that there is every potential to raise the per acre yield if proper attention is paid. The comparative yields of some of the crops in different countries are as follows:(Yields in maunds per acre).

Country	Paddy	Wheat	Maize	Barley
India	13.8	8.9	9.9	9.5
Pakistan	15.1	8.2	10.6	6.1
Japan	52.6	25.2	24.8	28.2
U.A.R.	58.4	26.1	26.0	26.5
U.S.A.	41.8	16.9	40.3	18.9
U.S.S.R.	21.9	10.5	16.6	12.0

The chart makes it clear that there is still scope and potential for more yields and this can be raised to the level of other countries. If we analyse the factors, we shall come to know that the main reason for less yield are the following:-

i) Lack of good seeds:-

The high yielding varieties of wheat paddy, maize, jowar and bajra have proved that the seeds are also important in getting very high yields if a package of practices are used.

There is comparatively four times more yield per acre through the use of improved varieties. The local seed has another handicap that if more fertilizer and manures are used, there will be lodging and the yield will decrease. Still the local seeds are not popular.

ii) Fertilizers and manures:-

The soil structure is deteriorating day by day due to cultivation from ages. The soil fertility is falling day by day. This can be improved by the use of manures and fertilizers. The cow dung is used for fuel and hence the compost is not available to the fields. In accordance to the F.A.O. statistics in 1963, the fertilizer consumption per hectare of a land and extra yield of wheat is as below:-

Sr. No.	Name of the country	Fertilizer NPK per hectare.
1.	Netherlands	518
2.	Belgium	446
3.	West Germany	304
4.	Japan	270
5.	France	307
6.	U.A.R.	307
7.	Italy	206
8.	U.S.A.	16.9
9.	India	3.5

There is a big potential for the use of fertilizers in the field and this will be involved in the yield per acre.

iii) Plant protection measures :

The crops are often damaged by the plant insects and diseases. Storage is also a problem. Crops are also damaged by rats. The plant protection measures are quite unknown to the villagers. The measures are also to be taken to protect the crop.

iv) Natural calamities :-

India suffered a lot of set back due to natural calamaties like drought and floods.

Flood :- Every year an average of 160 lakh acres of crops are damaged and thus directly or indirectly the losses come to 100 crores of rupees.

Drought:- In 30% of the area, the annual rain is 750 mm and hence the drought condition prevailed in 1965-66 and 1966-67.

The drought has made the food problem more grave. First, a big area of Arhar, pea and jowar suffers often due to frost.

v) Lack of electricity :-

The electricity has not been extended to most of the rural areas. This has hampered the mechanisation of farming.

vi) Fixation of prices :-

Due to price fluctuation the farmer is deprived of the income from agriculture production. Often the grains are very cheap which gives a loss to the farmer who loses the incentive. The prices of the food grains should be fixed.

Summarisation :

In short the causes of the food shortage are as below:-

i) Lack of improved seeds.
ii) Lack of manures and fertilizers.
iii) Lack of plant protection methods.
iv) Natural calamities.
v) Lack of electricity.
vi) Fixation of prices for foodgrains.

Testing and check up :

i) What are the cause of food shortage?
ii) How manure and fertilizers are related with the food shortage?
iii) What do you understand by plant protection measures?

Assignments:

How population is affecting the food shortage?

References:

i) The Indian Rural problems by Nanavati and Anjaria.

ii) Problems of Indian Agriculture.. Rama Publishing House, Meerut.

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Lesson Plan No. 14

HOW TO MEET THE PROBLEM OF FOOD SHORTAGE

1. Consolidation of holdings.
2. Practice of farming as industry and not as a way of life.

1. Objectives

1. To enable the trainees to understand the topic.
2. To improve their knowledge for guiding and assisting the cultivators.

2. Aids to be used

Black board and chart.

3. Presentation

The problem of food shortage can be met by adopting the following steps:

a) Intensive agricultural production.
b) Change in crop pattern.
c) Mass education of farmers in the new agricultural techniques.
d) Change in food habits.
e) Increase in the production of supplementary foods.
f) Consolidation of holdings.
g) Practice of farming as industry and not as a way of life.

Here we shall discuss the last two steps only.

i) Consolidation of holdings

Small holdings are the characteristic feature of the Indian agricultural organisation. One of the causes responsible for making agriculture an unprofitable industry in India is the sub-division and fragmentation of holdings.

Causes of scattered holdings

1. Pressure of population on the soil - 72% population earn their livlihood through agriculture.
2. Hindu and Mohammdan laws of inheritance. The ancestral landed property is shared among the successors equally.
3. Voluntary transfers by sale, gift or otherwise.
4. To equalise the qualitative differentials in the soil each heir takes strip of land from different plots to get an equal area of fertile land.

Disadvantages of scattered holdings

It badly affects the overall production, as it becomes a basic drawback which hinders adoption of improved

practices by the cultivator. The disadvantages may be detailed as below:

1. Wastage of labour and time.
2. Less chances of using improved impliments.
3. Difficulty in using plant protection measures.
4. Difficulty in having private irrigation facilites.
5. Involves more expenditure in safety measures.
6. Wastage of land in so many boundaries.
7. Uneconomic.
8. More chances of litigation and boundary disputes.

Consolidation of holdings

In this a cultivator owns only 2 or 3 plots, as all his holdings are consolidated into bigger plots. As it is advantageous and useful for increasing agriculture production so States like Punjab, U.P., M.P. have adopted it and other states are also going to adopt it.

Boundary disputes and lack of trained administrative personnel have handicapped the programme.

Steps in the process of consolidation

The following steps are followed in consolidation of holdings. The procedure is good but in practical shape, it has been noticed that the illiterate farmers suffer a lot due to dishonest administrative personnel. More vigilance is needed on the part of government machinery.

Steps

1. Surveying of land
2. Valuation of land in consultation with village committee.
3. Proposals and inviting objections.
4. Hearing the objections.
5. Appeals, if any.
6. Finalisation of chak.
7. Issuing of numbers in a chak to the farmer.
8. Arrangement for possession.

Advantages of consolidation of holdings in respect of increasing agriculture production.

1. Private irrigation arrangement is possible. Irrigation is the main basis for increasing agriculture production, as other package of practices can then easily and advantageously be adopted.
2. Control of pests and diseases becomes cheaper and easier.
3. Less expenditure is needed for safety measures. Permanent or temporary residential building can be erected within the farm.
4. Saving of labour and time.

5. Improved bigger impliments can easily be used.
6. Crop planning becomes easier. Crop pattern giving maximum yield can be adopted.
7. Less chances of boundary disputes and litigation.

Thus consolidation of holdings enables a farmer to derive the maximum benefit from his holdings. He can easily use all the package of practices, which result into higher yield and more income.

ii) Practice of farming as Industry and not as a way of life.

Indian farmer is conservative. He thinks his method as the best and cannot do away with his traditional practices, however unscientific and primitive they may be. This is because agriculture to him is not a mere profession but it is a way of life, which he has inherited from his ancestors.

Determined efforts - both social and scientific have to be made to free the farmers from this psychology, otherwise our efforts for food self-sufficiency will remain a far cry.

Social factor

Field work was taken to be socially degraded. So-called upper class Indian people thought agriculture work to be below their prestige. They would find it more profitable to rent out their lands than to manage them personally.

Too low investment of capital in agriculture

The land lords invested least so long as the operations were to be left in the hands of the most backward and ill-educated villagers. Their primary aim has been not to increase their income by adopting more efficient methods, but to rise in social prestige by abstaining in so far as possible from physical labour. The poor tillers of soil could not invest much due to poor financial conditions and due to the idea of deriving less benefit out of increased yield. As such investment of capital in agriculture has been too low.

Agriculture as a source of livelihood

So far Indian farmer has been carrying on agriculture as a source of livelihood for his family and nothing more. He did not care much to improve the lot of his family. He could hardly meet the basic necessities of life. He did not care to invest much amount so as to get maximum profit. He did not use crop pattern on sciantific basis. He grews crops, cereals, pulses and vegetables for the consumption of his family and surpluses to meet petty cash expenditure by selling them as and when he required money.

Need of change

The Indian farmer has thus suffered a lot and his condition deteriorated from bad to worse. In this present scientific era and suitable condition due to country's independence,

he must be benefitted to improve his own lot and share the responsibility of making the country self sufficient in food. As such this practice must altogether be changed and farming should be taken as an industry. Only then the problem of food shortage can be solved.

Agriculture as an industry.

The Indian farmer must adopt agriculture as an industry in which proper account of input and output is kept and optimum results or profits are aimed to be achieved. He should be literate and should then use scientific method through scientific point of view. In zones where the farmers have changed to this idea, the production has gone much higher as in Punjab, Haryana, West U.P. etc.

Steps to be followed for the change.

The following steps may be adopted to make the farming as an industry rather than a way of life in India.

1. Change in outlook and social values.

Through extension education the outlook of the Indian farmer should be changed. He should honour manual labour. Indian society should develop higher social values for physical labour. Man earning one's own livlihood through hard labour should be respected more than one who is idle and shirks manual labour. The Indian farmer should come out of his conservatism, he should depend more on effort than on fate and should be convinced that he can improve his standard of living to a great extent.

2. After arousing his felt need, he should be trained in better techniques of increasing agriculture production through study tours, group discussions, demonstrations, training camps etc.

3. He should be supplied with improved seeds, fertilizers, insecticides, irrigation facilities and cash credit according to farm production plans.

4. Proper arrangement of sale of his produce should be ensured so that he may have good price of his yield.

Education, fixation of low prices, security of land holdings, improvement of cooperatives, improvement of means of transport and communication will also assist him to the greatest possible extent. It can not be over emphasized that proper guidance from extension agency and research centres will be essential at each step. The Indian farmer is to be guided towards the right path and once he gets towards it, he will not lag behind in improving his own lot and that of the country as a whole by increasing agriculture production and thereby meeting the problem of food shortage.

4. Summarization

a) Consolidation of holdings is very advantageous to facilitate the use of package of practices by a farmer. This makes the agricultural operations economic and increases agriculture production.

b) By adopting practice of farming as an industry rather than as a way of life Indian farmer can adopt scientific methods. He will invest more to obtain the optimum benefit out of his holdings. He will follow production plan and cropping pattern most suited to give him highest income.

5. Testing and check-up

1. What are the advantages of consolidation of holdings towards increasing agricultural production?

2. What changes will be necessary in the working of the Indian farmer to practice farming as an industry and not as a way of life?

6. References

'The Indian Rural Problem' by Nanavati & Anjaria.

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Lesson Plan No. 15

MASS EDUCATION OF FARMERS AND ROLE OF FARMERS IN THE NEW AGRICULTURAL TECHNIQUES.

1. Objectives

   a) To acquaint the trainees with the importance of mass education of farmers and sons of farmers in the Agricultural techniques for increasing the food production.
   b) Making the trainees understand the various steps involved in it.

2. Previous background

   The trainees have already been told the various steps of meeting the food shortage such as Intensive Agricultural District Programme, farm planning, change in crop pattern etc. They had also 2 years training and considerable field experience.

3. Aids to be used

   a) Chalk board, flannel graphs, lecture notes.

4. Presentation

   Introduction.

The High Yielding Varieties programme has usherred in a new era in the agriculture of the country. The farmers are becoming increasingly aware of the fact that they can double or tripple their incomes if they adopt these varieties, but there is a special know how for the successful cultivation of these varieties and in order to drive the fullest advantages the farmers need the learning of know how and do how these varieties. The Government has, therefore, rightly thought of running, various types of short training courses for the farmers and their sons in the techniques of cultivation of high yielding varieties which are new things for one and all.

The matter of motivating the farmer depends to a great extent on the competency of these conducting the training, the adequacy of the information presented and the techniques of conducting the training.

A. Importance of farmers education/training.

"Education implies the production of hanges in the attitudes and behaviour of a person."

The approach to any people must be educational and so also approach to production must be educational. The importance of training of farmers as a means of increasing agricultural production these cannot be over emphasised. The ultimate effectiveness of High Yielding Varieties Programme depends on decision making ability and managerial skill required where production occurs the individual farmers.

B. Objectives of farmers training.

The main aim of farmers' training in its various approaches is to improve the farmers' capability and to demonstrate new methods of farmers and new crops. Farmers' training, especially the purpose - that of developing leadership in agricultural progress for rural areas. Thus the

two objectives will be helpful in meeting the food shortage in the country. It is intended to organise the farmers through training to mutual help and self help and thereby inculcating a sense of self reliance and self confidence.

Since all farmers in the village cannot be trained, such of those who get training will in their turn take up the demonstrations of the new agricultural techniques. The farmers are also expected to acquire competence in planning their own programming, keeping the records, comprising and evaluating the economics.

C. Farmers education not a replacement of Extension activities.

Organised farmers training should not be looked on an entity within itself but rather as a point for the whole agricultural training and extension policy in an area . The farmers training should not be regarded as a replacement for field extension activities such as village demonstrations and meetings, farm and home visits etc. The teaching has to be improved by means of field extension activities with background information which helps the farmers to understand why certain practices are being advocated.

D. Characteristics of farmers training.

To be effective, attention should be given to the following points.

a) Training must go to farmers where they are i.e. farm is the place where farmer is mostly found and will feel most comfortable there.
b) Training must be specific to farmers present interest and needs-on the subjects farmers are interested.
c) The process must respect the fact that farmers are adults.
d) Training must be fitted into the time when farmers are not too busy.
e) The unit of instruction for teaching and training must be a particular new or changed practice.
f) It must be accompanied by immediate opportunities for farmers to try out new methods taught - such as training on fertilizer application needs to take place shortly before it is time for applying fertilizers.
g) Each new or changed practice proposed must be technically sound and economically profitable.
h) Farmers need encouragement to experiment.

Methods in training.

1. Method and result demonstration.
2. Group discussion.
3. Field trips to research and demonstration farms.
4. Film shows.
5. Samples, specimen and exhibits.
6. Lectures followed by field visits and discussions.
7. Organising farmers field days.

Where to impart training.

1. Production cum demonstration training camps may be held:

   a) On the farm of a progressive farmer.
   b) At agricultural research station or Govt. seed farm.
   c) Private farms located centrally and approachable easily.

Institutional training.

a) Farmers training centres.
b) Agricultural colleges and Universities.
c) Agricultural schools.

Time for training.

1. It may be well ahead of the following crop season.
2. It may be just a week or ten days before commencement of the crop season.
3. It may be when farmers are free from farm operations.
4. Institutional training may be run throughout the year except the peak agricultural operations.

Application.

While teaching, the use of notes, charts, illustrations and question answers will be made to arouse the attention and create interests in the trainees.

4. Summarising and recapitulation

The salient points of the talk will be repeated as follows:

1. Need and importance of farmers training.
2. Characteristics of farmers training.
3. Methods of farmers training.

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Lesson Plan No: 16

CHANGE IN THE FOOD HABITS

1. Objectives:

To acquaint the trainees about the importance of bringing about a desirable change in the food habits, so that it may be made useful to the normal growth and maintenance of the body, as well as ease the food shortage.

2. Previous background:

i. The trainees have already been taught about food problems.

ii. A.N.P. has also been discussed.

iii. Trainees have field experience.

3. Aids to be used:- Flannel strips, chalk board, charts.

4. Presentation: -

Introduction:- There have been continuous efforts to increase the agricultural production to meet the problem of food shortage and reduce our dependence on food imports from abroad. With the advent of the high yielding varieties programme, the country has ushered in an era of agricultural production and the idea of getting the break through the agricultural production may not make us complacent. We should make efforts in tackling the problem of food shortage in some other way also. The other strategy can be attempted to change the food habits of such a way that it may lead to saving of cereals and maintaining the caloric levels of food thus substituted.

Food no doubt is such a physical requirement which may be explained in scientifically and logically but food is perceived more in the sentiments and value judgments. Food is so much changed with sentiments that immigrants have been observed to change their dress easily, but not the food habits. It constitutes one of the most recalcitrant change resistence zones of culture. It has in India also become a symbol of status so much so that the real purpose has gone in to oblivion.

Presentation of the new topic:

In the light of the above discussion let us examine as to why we eat and what we eat?

1. We eat for healthy growth of the body.
2. For maintaining the body build up.
3. Thereby to live happily.

We need balanced diet for a healthy living. Balanced diet denotes the food which may contain all the nutrients such as protiens, carbohydrates, fats, minerals and vitamins.

The Indian council of Medical Research has recommended the following daily average balanced diet for the Indian keeping in view of the food tastes habits.

Food	Quantity
Cereals	450 gms.
Pulses.	85 gms.
Green vegetables leafy:	114 gms.
Other vegetables.	170 gms.
Fruits.	85 gms.
Milk and milk products.	284 gms.
Sugar and Jaggery.	57 gms.
Oil and Ghee.	85 gms.
Fish and meat.	85 gms.
Egg.	1 egg.

An average man needs 3000 calories per day which is available in the above recommended diet. With the following nutritive constituents:

Sr.No:	Nutrient:	Quantity
1.	Protien	20 gms.
2.	Carbohydrates.	450 "
3.	Fat.	90 gms.
4.	Calcium.	1.4 gms.
5.	Phosphorus.	.20 gms.
6.	Iron.	47 mgm.
7.	Vitamin A	8400 I.U.
8.	$V\text{-}B_1$	2.1 mgm.
9.	$V\text{-}B_2$	1.8 gms.
10.	$V\text{-}B_3$	22 mgs.
11.	V-C	240 gms.
12.	V-D.	400 I.U.

The I.C.M.R. carried out a survey in 1966 about the dieting pattern of the average Indian. It attributes the nature of our ill health to the following common intake of food nutrients:

S.No:	Name of the Food.	Quantity.
1.	Cereals.	471 gms.
2.	Pulses.	68 gms.
3.	Green Vegetables (Leafy)	20 gms.
4.	Other vegetables.	91 gms.
5.	Fruits.	66 gms.
6.	Milk and milk products.	80 gms.
7.	Oil and ghee.	14 gms.
8.	Sugar and Jaggery	20 gms.

9. Meet, fish and egg. 15 gms.

The above food constituents provide only 2100 calories per day and a deficient intake of nutrients as will be clear below:

Sr.No:	Nutrient.	Quantity.
1.	Protien.	58 gms. (32 gms.)
2.	Carbohyderates.	405 gms.(45 gms.)
3.	Fat.	29 gms.(-61 gms.)
4.	Calcium:	0-6 gms.(-61 gms.)
5.	Phosphorous:	1.4 gms. (-0.8 gms.)
6.	Iron.	31 gms.(-16 gm.s)
7.	V.A.	1200 IV (-7200 IV)
8.	VB1.	1.7 mgs.(-04 mgs.)
9.	VC	57 ms.(-183 mgs.)
10.	VD	350 TV (-50 TV).

The above table clearly establishes that due to our traditional food constituents intake, we are getting a deficient and ill balaneed diet. We are also consuming more cereals which can be saved by a balanced diet intake. On an average each individual in the country can help in saving 71 gms. of cereals per day. Looking to the vast population in the country this 71 gms. per day can ease the food problem considerably.

Therefore, the change of food habits is a must for country's help sufficiency in food. What and how of it can be discussed in the following habits:-

1. Reduction of daily cereal intake by 71 gms. or 1 chatak.

2. To make up the deficiency calorie intake, the daily diet should have more of:-

1. Vegetables (Greens and others)
2. Milk and milk products.
3. Fruits.
4. Meat, fish and eggs.

We consume only 68 gms. of pulses. This should also be increased by 85 gms. to make good the deficient calorie intake.

3. We consume only 68 gms. of pulses. This should also be increased by 85 gms to make good the deficient calorie intake.

4. Our fat intake is also deficient, but in India diet, besides oil and ghee, this can also be made good by pulses, vegetables and meat.

Habit is one's second nature and therefore, scientific logic may not to able to break much ice in changing the food habits. Continuous and sustained nutrients education is a necessity to change the diet pattern not only for the improving the health, but also to solve the food problem. Change in food habits will have to be taken up through social frontiers also. Sustained and informal education is needed to avoid:-

1. Over eating: Do not live to eat but eat to live.
2. Cheap devices to preserve it should be evolved and popularised to save the food material.
3. Lavish and wasteful attitude is also a common practice. Psychological change is needed to handle this in put of the problem.

Subsidiary foods:

The foods which can replace the cereal intake and maintain nutritive standards are called subsidiary food. The introduction of subsidiary foods will play an important role in reducing one dependence on cereals. Hence, production of subsidiary foods should be encouraged and popularised. The subsidiary foods are:-

1. Sweet potato, potato.
2. Poultry and its products.
3. Fish.

5. Summarisation:

1. Our traditional intake.
2. Recommended diets.
3. How to change it?
4. What is a habit?
5. Subsidiary foods.

6. References:

1. Nutrition Journal (March 68)
2. Food for health by Devdass.

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Lesson Plan No.17

STAGES IN ADOPTION PROCESS AND INFORMATION SOURCES

1. Objective

To acquaint the trainees with the adoption process and its stages.

2. Previous background

i) The trainees have already learnt the use and effect of mass communication.
ii) They have understood the importance of the new agricultural practices in speeding up the agricultural production to solve food problems.

3. Aids to be used

i) Blackboard; (ii) Chalk; and (iii) Suspense chart.

4. Presentation

Introduction.

In short Extension is education in action. Its main function is to bring change in knowledge, skill and attitude. This can be only done by disseminating useful ideas to the people effectively and inspiring them for practical application of these ideas. It attempts to encourage adoption of new ideas and practices. Keeping this process in view and considering the importance of adoption much research work has been done and is being done on adoption process and aspects related to it. Now we should try to explain the adoption process and its various stages on the basis of research generalizations with an objective to use this knowledge for improving our Extension programme.

Presentation of new subject matter.

Generally people do not accept new ideas or practices immediately upon hearing about them. They hear about an idea or practice, they examine it fully according to their means, they try it and then when they are fully satisfied they adopt it. The time from initial knowledge to final acceptance may range from a few days to many years.

Now we can say that the adoption process is the mental process through which an individual passes from first hearing about an innovation to final adoption. The adoption process should be distinguished from the diffusion process which is the spread of a new idea from its source of invention or creation to its ultimate users or adopters. Diffusion occurs among persons while adoption is an individual matter like learning.

The theory of learning is also applied, to some extent, in adoption process. The process by which innovations are adopted by individuals is essentially a limited example of how and type of learning takes place.

The adoption process is one type of decision making. The adoption of an innovation requires a decision by an individual.

Stages in adoption process.

According to Lion berger, Ryan and Gross were perhaps first to use stage concept to study the adoption of a farm practice. However, it was wilkening who first pointed out that an individual decision to adopt an innovation was a process composed of stages or steps.

The adoption process is genuinely conceptualised in five stages or steps. Though there is difference of opinion regarding the number of the stages, still the majority of researches in favour at the five stages which are as below:

i) Awareness.

At the awareness stage the individual is exposed to the innovation but he has only general information about it. He is not yet motivated to seek further information. Hassinger points out that information about new ideas often does not create awareness, even though the individual may be exposed to this information, unless individual has a problem or a need that the innovation promises to solve. Roger is of the opinion that awareness of a new idea creats a need for that innovation not a need precede awareness of an innovation.

ii) Interest.

The interest has been refered to as the information stage, knowledge step and interest information" stage by different researchers. At this stage the individual becomes interested in the new idea and seeks additional information about it. He is willing to listen and learn more about the innovation. The personal need of the individual making the decision remains much the same.

iii) Evaluation.

At the evaluation stage a person weighs the information and evidence accumulated in the previous stages in order to decide whether the new idea or practice is basically good, and whether it is good for him. In a sense he reasons through the pros and cons mentally and applies them to his own situation This stage can be referred to as the "mental trial stage". Other research workers have termed this stage as "Application", "acceptance" "conviction" evaluation application - decision.etc.

iv) Trial.

The main function of the trial stage is to demonstrate the new idea in the individual's own situation and determine its usefulness for possible complete adoption. The

individual may seek specific information about the method of using the innovation at trial stage.

v) Adoption.

At adoption stage the individual decides to continue the full use of the innovation. Adoption implies continued use of the innovation in the future. The main function at this stage is consideration at the trial results and decision to ratify sustained use at the innovation.

Some useful generalisation concerning an adoption process:

a) Rejection and discontinuance - An innovation may be rejected at any stage in the adoption process. Rejection is a decision not to adopt any innovation.

Rejection of an innovation can also occur after adoption. A discontinuance is a decision to cease use of an innovation after previously adopting. Discontinuance should be always avoided or reduced.

b) Sources of information vary in their functions in adoption stages. The rank order at information sources by stages in the adoption process is given below:

	Awareness	Interest	Evaluation	Trial	Adoption
i)	Mass media	Mass media	Friends & neighbours.	Friends & neighbours.	Personal experience is the most important factor in continued use of an idea.
ii)	Friends & neighbours.	Friends & neighbours.	Extension workers.	Extension workers.	Friends & neighbours.
iii)	Extension worker.	Extension worker.	Dealers & salesman.	Dealers & salesman.	Mass media
iv)	Dealers & salesman.	Dealers & salesman.	Mass media	Mass media.	Dealers & salesman.

c) The adoption period) The adoption period is the length of time required for an individual to pass through the adoption process from awareness to adoption. This time is measured in days, months, and years. The adoption period is thus a gestation period in which a new idea is fermenting in the individual mind .

5. Summary

Adoption process is conceptualised in five stages or steps - awareness, interest, evaluation, trial and adoption. These stages are not rigid pattern for all practices and all types of people.

Discontinuance should always be avoided. All people do not adopt an idea or practice at the same time. Sources of information vary in their functions in adoption stages, hence should be used corresponding to stages. The adoption period is the length of time required for an individual to pass through the adoption period.

6. Testing and check up

1. Explain the stages in adoption and give example of each stage?

2. Differentiate between evaluation and trial stages?

3. What do you understand by rejection, discontinuance and adoption period.

7. References

1. Roger E.M. Diffusion of innovation, Free Press at Glance, New York, 1962.

2. Adoption of New ideas and practices -H.F.Lionberger. The Iowa State University Press, Ames, Iowa, 1964.

3. Summary Record (4th to 16th November, 66), EEI, Nilokheri.

4. Summary record, Second course(7th January to 6th April, 63 EEI, Rajendra Nagar, Hyderabad.

5. Sociology, Social Research and Social Problems in India. R.N.Saksena. Asia Publishing House, Bombay, 61.

8. Assignments

Analyse the stages at adoption of any improved agricultural practices.

Lesson Plan No:16

ADOPTER CATEGORIES AND THEIR CHARACTERISTICS

1. Objective:

To acquaint the trainees with adopter categories and the characteristics of each category.

2. Previous background:

Trainees have already learnt adoption process. Stages in adoption and information sources.

3. Aids to be used:

Black board and chalk.
Suspense chart.

4. Presentation:

A. Introduction:

We have already learnt about individual adoption process. An individual passes through a mental process from first hearing about an innovation to its final adoption and it is called adoption process. But now we have to learn community adoption process. A community consists of a number of persons and every individual does not adopt innovation at the same time. Some persons adopt innovation as soon as they come to know about it while there are others who adopt the innovation in the last. Ordinarily, adoptions are very slow at first. After an initial slow start, they increase at an increasing rate until half of the potential adopters have accepted the change. After this acceptance continues but at a decreasing rate.

Characteristically, first adoption takes much longer time from awareness to final adoption than subsequent ones. The fact that people adopt innovations at different times means that they can be classified in terms of their time position in the adoption pattern.

B. Presentation of new subject-matter: -

It has been already pointed out that all individuals do not adopt innovation at the same time. Rather individuals adopt along a time continuum and may be classified into adopter categories on this basis.

Definition:- Adopter categories are the classifications of individuals within a social system on the basis of innovativeness.

Classification:- There is difference of opinion regarding the number and names of categories; still here

we shall mention only those number and names which are in general use. The adopter categories are five in number as given below:-

1. Innovator.
2. Early adopter.
3. Early majority.
4. Late majority.
5. Laggards.

Innovator:-

The individuals who are always eager to try innovations are called innovators. They are venturesome, include control of substantial financial resources to absorb the loss of an unprofitable innovation and ability to understand and apply complex technical knowledge. They desire the hazardous, the rash, the daring and the risking. Their number in a community is 2½%.

Early adopter: -

Early adopters are a more integrated part of the local social system than are innovators. This adopter category has the greatest degree of opinion leadership. Potential adopters look to them for advice and information about the innovation. This adopter category is generally sought by change agents as a local missionary for speeding the diffusion process. These persons can be identified as our gram sahayaks. There number in a community is about 13½ %.

Early majority:-

The early majority adopt new ideas just before the average member of a social system. They do not hold leadership position. Their adoption period is longer than that of innovators and early adopters. The motto of the early majority seems to be "Be not the last to lay the old aside, nor the first by which the new is tried." They follow with deliberate willingness in adopting innovations, but seldom.

Late majority:-

Late majority do not adopt until a majority of others in their system have done so. The late majority adopt new ideas just after the average member of a social system. The weight of public opinion must definitely favour the innovation before the late majority are convinced. The pressure of peers is necessary to motivate them for adoption of an innovation.

Laggard:-

Laggards are the last to adopt an innovation.

They possess almost no opinion leadership. Laggards are the most localite of all adopter categories and many are near isolates. They are suspecious of innovation innovators and change agents. They are worshipers of traditions. When laggards finally adopt an innovation, it may already be superseded by another more recent idea which the innovators are using.

Characteristics of adopter categories:

Each adopter category has certain characteristics of its own. These characteristics can be studied under the following headings:-

Age - Earlier adopters are younger in age than later adopters.

Social status: - Earlier adopters have higher social status than later adopters.

Financial position - Earlier adopters have more favourable financial position than later adopters.

Specialisation - Earlier adopters have more specialised operations than later adopters.

Mental ability: - Earlier adopters have a type of mental ability different from that of later adopters.

Communication behaviour:

1. Impersonal sources:

Impersonal source of information are more important than personal sources for relatively earlier adopters of innovations than for later adopters.

2. Cosmopolite sources:

Cosmopolite sources of information are more important than localite sources for relatively earlier adopters of innovations than for later adopters.

3. Closer contact:-

Earlier adopters utilize information sources that are in closer contact with the origin of new ideas than later adopters.

4. More sources: -

Earlier adopters utilize a greater number of different information sources than do later adopters:-

5. Social relationships:-

There are important differences in social relationships on the basis of adopter category.

Cosmopoliteness - Earlier adopters are more cosmopolite than later adopters.

Opinion leadership:- Earlier adopters have more opinion leadership than later adopters.

5. Summarisation:-

1. Adopter categories are the classification of individuals within a social system on the basis of innovativeness. The adopter categories are five in number.

   i. Innovator.
   ii. Early adopter.
   iii. Early majority.
   iv. Late majority.
   v. Laggard.

2. The characteristics at different categories are as below:-

A composite picture at adopter categories:-

S.No: Adopter categories.	Salient values.	Personal characteristics.	Communication behaviour.	Social relationship.
1. Innovators.	Venturesome willing to accept risks.	Youngest age. Highest Social status, largest and most specialised operations; wealthy.	Closest contact with scientific information sources: Interaction with other innovators: Relatively greatest use of impersonal sources.	Some opinion leadership. Very cosmopolite.
2. Early adopters.	"Respect" Regarded by many others in the social system as a role model.	High social status, large and specialised operations.	Great contact with local change agents.	Greatest opinion leadership of any category in most social systems, very localite.

3. Early majority.	"Deliberate" Willing to consider innovations only after peers have adopted.	Above average social status, averagesized operations.	Considerable contact with change agents and early adopters.	Some opinion leadership.
4. Late majority.	"Skeptical" Overwhelming pressure from peers needed before adoption.	Below average social status, small operation little specialisation small income.	Secure ideas from peers who are mainly later majority or early majority; less use of mass media.	Little opinion leadership.
5. Laggards.	"Tradition" oriented to the past.	Little specialisation, lowest social status, smallest operation, lowest income, oldest in age.	Neighbours, friends and relatives with similar values are main information source.	Very little opinion leadership, semi-isolates.

6. Testing and checking:-

1. What do you understand by adopter categories?

2. Differentiate between the characteristics of early adopters and laggards.

7. Assignments:

1. Analyse the adoption categories on the basis of an agricultural practice adopted in your area.

2. How will you identify gramsahayaks (Early adopters) in your area on the basis of characteristics of different adopter categories?

8. References:-

1. Diffusion of innovation - E.M. Rogers.

2. Adoption of New ideas and practices. H.F. Lionberger.

3. Summary record Second Course 7th to 6th April,63. EEI Rajendra Nagar, A.P.

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Lesson Plan No. 19

OPINION LEADERS AND THE FLOW OF IDEAS

Objectives:

i) To acquaint the trainees with the two step flow of communication and the importance of personal influence in decision making and adoption of improved agricultural practices.

ii) To enable the trainees to understand the characteristics and functions of opinion leaders.

Previous background:-

The trainees have already been taught the adoption process and adopter categories.

Presentation:

Introduction :-

The adoption process is one kind of decision making. In making decision the influence of neighbours and peers play vital role. At evaluation stage the influence of opinion leaders helps an individual in accepting or rejecting an innovation. Just as it is obvious that all individual do not adopt an innovation at the same time, so it is obvious also that all persons do not exert an equal amount of influence on the adoption decisions of others. Those individuals who have a greater show of influence are called "opinion leaders" because they take the lead in influencing the opinions of others. Different terms have been used for the same basic dimension by different researchers.

Presentation :-

Opinion leaders are defined as those individuals from whom others seek advice and information. A variety of term other than opinion leaders have been used by many writers as.-

Key communicators [Lionbuger] Leaders, Informal leaders, Information leaders, Adoption leaders, Local influentials influencers, test makers, style setters, spark plugs, gate keepers etc. Active and passive roles for adopters and rejectors.

Some adopters are active in influencing other individuals to adopt. Others after their own adoptions decision, play a passive role in spreading an innovation. In the same way some rejectors are active while others are passive in communicating their opinion about an innovation.

In this way the four cells in the two by two table are Active adopters who adopt the innovation and influence others to do so.

2) Active rejectors who reject the innovation and influence others to do so.

3) Passive adopters who adopt the innovation but do not attempt to influence others to do so and 4 passive rejectors who reject the innovation but do not attempt to influence others to do so.

Importance of personal influence: -

In all types of decision making personal influence has been bound to be an essential ingredient. Communication involving a direct face to face exchange between the communicator and receiver which results in changed behaviour or attitude on the part of the receiver is called personal influence.

. Opinion leaders are really "men who exert personal influence upon a certain number of other people in certain situations" Merton -

When is personal influence most important?

1) Evaluation stage :-

- Personal influence is most important at the evaluation stage in the adoption process and less important at other stages.

2) Later adopters :-

Personal influence from peers is more important for relatively later adopters than for earlier adopters.

3) Uncertain situation :-

Personal influence from peers is more important in uncertain situations than clear cut situations.

What is known about opinion leaders:-

1 Conformity to Norms:-

Opinion leaders confirm more closely to social system norms than the average member. Homans stated "the leader must live up to the norms of the group all the norms - better than any follower."

Lack of overlap :-

Merton pointed out that opinion leaders may differ as to the breadth of their spheres of influence. Some opinion leaders termed "monomorphic" exert their influence only in one rather narrowly defined are,such as politics or fashion. Other opinion leaders are "polymorphic." They exert influence in a number of areas.

Opinion leaders differ from followers in many respects :-

Information sources :-

Opinion leaders use more impersonal, technically accurate and cosmopolite sources of information than do their followers. The opinion leaders use mass media magazines, news papers etc. more than their followers.

Cosmopoliteness:

Opinion leaders are more cosmopolite than their followers. Opinion leaders form a communication link with sources outside the social system and provide an avenue for the entrance of new ideas.

Social participation:-

Opinion leader have more social participation than their followers. However opinion leaders are not the formal leaders in their communities.

Social status:-

Opinion leaders have higher social status than their followers. It is found in so many researches that opinion leaders have larger farms, higher farm incomes and higher social status than followers.

Innovativeness :-

Opinion leaders are more innovative than their followers. They are earlier adopters than their followers. The research findings do not indicate, however that opinion leaders are necessarily innovators. There seem to be some opinion leaders in almost every adopter category. However it is clear that opinion leaders are more innovative than their followers.

Social system norms on innovativeness seem to determine at least in part, the innovativeness of opinion leaders. So, social system norms should be taken into account when we are making generalisation about whether or not opinion leaders are innovators.

Measuring opinion leadership:-

1) The sociometric technique:- It consists of asking group members to whom they go for advice and information about an idea. A great member of respondents must be interogated to locate a small number of opinion leaders.

2) Key informants:- The key informants in a social system may be asked to designate the opinion leaders.

3) The self designating technique:- It consists of asking a respondent a series of questions to determine the degree to which he perceives himself to be an opinion leader.

Summarisation.

Opinion leaders are those individuals from whom others seek information. They play an important role in the adoption or rejection of the innovation. Personal influence from peers is most important at evaluation stage in adoption process and less important at other stages,. For relatively later adopters than for earlier adopters and in uncertain situation rather than in clear cut situation. These methods have been utilized to measure opinion leadership.-

i) Sociometric.
ii) Key informants.
iii) Self designating scale.

Application :

As the opinion leaders play important role in the evaluation stage, the change agents must try to convince the opinion leaders first. If they adopt an innovation, they will try to make the innovation adopted by their followers. Thus they will speed up the adoption rate. So it is very important for extension workers to identify and convince the opinion leaders first.

Test and check up :

i) What is the role of opinion leaders in adoption process?

ii) How will you measure opinion leadershiop?

Assignment :

i) How will you measure the opinion leadership?

ii) What is the role of opinion leaders in adoption process.

References:

i) Diffusion of innovation. E.M.Rogers.

ii) Adoption of New idea and practices - H.F.Lionberger.

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Lesson Plan No.20

CHARACTERISTICS OF INNOVATORS

1. Objectives

   1. To make them understand the characteristics of Innovators.

   2. To make them efficient Extension workers.

   3. To give a clear cut idea about the Innovators and how help can be taken from them in adoption of new Agriculture practice.

2. Previous background

Trainees have been taught adoption process and the adopter catagories.

3. Aids to be used

   i. Flannel strips;
   ii. Charts; and
   iii. Blackboard and chalk.

4. Presentation

a)Introduction.

1. What are the stages in adoption?
2. What do you know about adopter categories?
3. What are qualities of Innovators.

b)Today we shall discuss the characteristics of Innovators in relation to other categories of adopters. How much they are different from other catagories and how they effect in adoption of new ideas. As you know there are five categories of adopters.

(i) Innovators; (ii) Early adopters; (iii) Early majority; (iv) Late majority; and (v) Laggards.

c)Innovators Innovators are the first to introduce new ideas or practices and generally have a reputation in the Community for doing so. In farm practice diffusion research they have ordinaribly been defined in the terms of readiness with which they have adopted one or more new farm practices even through the practices adopted have already been tried and tested by Agricultural experiment stations and perhaps progress in farms elsewhere. Innovators adopt each of the practices from one to seven years earlier than the latters.. Innovators are the first 21/2% to adopt.

A number of the more important and well researched charact ristics of innovators are as follows:

1. Age. Innovators are younger in age than later adopters. The general evidence seems to indicate that Innovators are younger than laggard. There are adequate theoretical grounds for expecting the younger members of a social system to be more innovative. The socialization of personality occurs mainly in very early life. In a rapidly changing culture, this means that younger people learn a more modern set of cultural life values than do older people who were socialized in an earlier era.

2. Social status:

Innovators have higher social status than later adopters. It must be pointed out that the exact relationship between innovativeness and social status, while generally positive may depend in part on the characteristics of the innovators under analysis. Research has proved that upper classes adopt new ideas more rapidly. Thus social class values attached to the innovativeness and social status. Some researchers have correlated education, one dimension of social status with innovativeness.

3. Financial position:-

Rogers found that much higher gross farm income was characteristics of innovators. This relationship between farm income and innovativeness has also been reported in over 18 different studies. Wealth and innovativeness appear go hand in hand. Do innovators innovate because they are rich or are they rich because they innovate? There are adequate reasons why wealth and innovativeness vary together. Greater profit go to the first to adopt. Therefore innovator gains a financial advantage through his innovation as some new ideas are costly to adopt and require large initial outlays of capital. Only wealthy units in a social system may be able to adopt these innovations. As the innovator first, to adopt, he must take risk that can be avoided by later adopters. Certain innovators, new ideas fail. He must be large enough to absorb the loss from these occasional failures. It should be pointed out that while wealth and innovativeness are high related economic factors do not offer a complete explanation of innovative to behaviour for example while Agricultural innovator tend to be wealthy, there are many rich farmers who are not innovators.

4. Specialization: Innovators have more specialized operations than other categories of adopters. Innovators specially tend to be specialized and place "all their eggs in one basket." For instance, farmers innovators concentrate on one farm interprize such as hogs, sheeps or dairy. This specialization allows the innovator to keep up to date more easily in his speciality and may lead to seek more cosmopolite source of information.

5. Mental ability: Innovator must be able to adopt a new idea largely from mass media source of information. They cannot simply copy the behaviour of other members of their social system because these -

other members have not yet adopted the innovation. On the basis of this type reasoning one might expect innovators to possess a different type of mental ability than do laggards.

5. Summarising and recapitulation

The innovators in social system tend to be younger in age have higher social status, a more favourable financial position, more specialized operations and a different type of mental ability than other categories of adopters. They are in closer contact with origin of new ideas. They tend to have larger farms than average for the area when they live and have the necessary capital and willingness to take risk. Frequently innovators know they are different and feel neighbours are waiting and wondering when they will go broke.

6. Testing & check up

1. What do you know about innovators?
2. How they differ from other categories of adopters?
3. What are qualities of an innovator?

7. Assignments.

Trainees will be asked for doing the special study in the village allotted to them.

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Lesson Plan No. 21

FACTORS AFFECTING THE REJECTIONS OF INNOVATION

1. Objectives :

   i) To acquaint trainees about the factors which affect the rejection of innovation or which influence the rejections of new agricultural improved practices.

   ii) To make them efficient extension workers.

2. Previous background:

The trainees have already been taught about the adoption process their stage in adoption, information sources, adopter categories.

3. Aids to be used:

Black board. Chalk. Flannel strips. Suspense chart.

4. Presentation :

Introduction :-

What are adoption process?
What do you understand about information stages?
What are the adopter categories?
What do you know about the rejection of innovations?

The reception given to a new idea is not so unpredictable as it sometimes appears to be. The character of the idea is itself an important determinant
"H.G.Barnett.

A new idea adopted will depend partly upon the characteristics and nature of idea. Certain agricultural practices have innate characteristics which speed their rate of adoption, other practices may have retarding factors. The following are the main factors which greatly affect the rejection of new improved agricultural practices.

Economic factors :-

1. Cost :- The new practices that are high in cost generally tend to be adopted more slowly. Generally ordinary farmers reject the new idea as they are quite unable to bear the risk. The degree of risk is probably related to the cost of the practice. So that the innovation that cost high will be rejected by the farmers.

2. Adequacy .-

In the case of a mechanical innovation as improved agricultural implements, public acceptablity depends in part on the adequacy of that innovation. Generally such innovations are rejected by the public due to its complicacy. Such rejections are also done due to lack of strong social demand, if there is any substitute of the same then the rejection degree may be more.

3. Need and relative advantages :-

If farmers have no urgent need for a new practice or there are no crises such as drought, flood, low prices, then there is great possibilities of rejection. Generally people adopt to new idea when they percieve the need for new idea otherwise they tend to reject the same.

Social factors :-

1. Compatiblity :-

The new idea which is not compatibile with the cultural forms of a social system will not be adopted so rapidly as an idea that is compatible.

2. Complexity or simplicity also affect the adoption a lot.

3. Values are the important factor which highly affect the adoption. The value of accumulating material wealth and high standard of living that is to be associated with high adoption rate. But on the other hand values security, debt free farm ownership on the traditional farming, methods are found to be associated with low adoption either there are the causes of rejection. Generally the farmers give an importance to values which may be reasons of rejection of the new practices.

4. Communicability .-

Communicability is the degree to which the results of an innovation may be diffused to others. The results of some ideas are easily observed and communicated to others while some innovations are difficult to describe to others. These are not easily communicated as well as easily understood by the farmers and may cause the rejection of new practices. The innovation which can not divide, are mostly rejected by the farmers.

5. The neighbour-hood exert influence on adoption rate. Residence in low adoption neighbour hood are conducive to slow acceptance of change. Mostly, the farmers who resides in the vicinity of such neighbours, reject the new ideas.

6. Social groups :-

People belong to many groups, each of which tends to set up some standard of behaviour for its members. The reward for conformity to these standards is acceptance and prestige, the penalty for non conformity is loss of them. Some of the group to which a farmer belongs may have standard of "proper" farming behaviour, including degree of receptivity to new ideas and change.

7. Families vary in their adoption behaviour :-

There is likely to be a high adoption rates in families where the father is receptive to new ideas and practices. The membership of other members of the families to local organisations and institution also affect the rate of adoption of innovation.

8. Social clique influences adoption patterns: -

Low social status and separation from the groups, people generally reject the adoption of innovation, social clique influences the adoption.

C - Personal Factors :-

Less change person and satisfied man does not accept the new ideas so quickly. They mostly reject the new ideas rather than other persons.

D - Besides this above general factors such as complexity, divisibility, demonstrability, social systems also affect the rate of adoption of innovation. In many cases these are causes of rejection of the improved practices.

5. <u>Summarisation</u> :

These factors which play vital role in adoption and diffusion of innovations. These factors can be categorized in Economic, Social, cultural, personal and general. The main factors are relative advantage, compatibility, complexity, divisibility and communicability which affect the rejection of practices.

Testing and check up :-

i) What are different personal factors which affect the rejection of practices by farmers?

ii) What are different social factors and general factors which affect the rejections?

References :

i) Adoption process of new ideas by Lionberger.

ii) Diffusion of Innovations by Roger E.M.

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LESSON PLAN No: 22

1. Class. — Village Level Workers.

2. Subject. — Agriculture Extension.

3. Topic. — Leadership - Involvement and Role in Agri. Extension.

4. No. of periods allotted: One period of 45 minutes.

5. Objectives.

   1. To teach the trainees the importance of involvement of local leaders in Extension Programme.

   2. To acquaint them with the role of leaders in Extension Programme.

   3. To make them effective extension workers so that they may extend the programme in the villages through local leaders.

6. Previous background: The trainees know the concept, philosophy and theories of leadership. They also know about the development, training and identification of leaders.

7. Aids to be used: Black Board and Chalk, Flash cards and Flannel strips.

8. Presentation:-

(a) Introduction:-

There seems to be universal acceptance on the use of leaders as part of the process of extension education. In recent surveys conducted in the country, it was found that almost every agent said leaders were a great help in carrying on extension work.

(b) Presentation of new knowledge:-

Let's see some reasons why use of leader is so important in extension work.

i. Using leaders helps the agent to expand (extend) his educational services.

ii. Rural people will more rapidly accept new practices when their leaders adopt them.

iii. By "working through leaders" agents develop good contacts with the people and better know their needs.

iv. There is usually less disruption of the programme when agents changes if the leader approach is used effectively.

v. Using leaders helps to fulfill the extension principle of involving people in the process of helping themselves.

In the normal patterns of life, children teach each other, house-wives exchange ideas, skills and practices. Farmer pass on to each other those practices that develop Agriculture. However, the normal procedure does not move rapidly and tends over long periods, to perpetuate the same ideas, skills, concepts and practices. (Thus "cultures" are developed). The group tends to be self-contained and the group begins to impose limitations through customs. We, therefore, need to break the group pattern to allow new ideas and concepts to penetrate (This is called progress).

A member from outside the group may have impact and can bring about change. However, relatively speaking, to change groups would require as many "trained" and professional individuals (change agents) as there are groups.

Most countries do not have this human man-power suree to do the job. So we resort to laws, edicts and even grandiose schemes suchas land reform, colonisation, rural plans, often forgetting the individuals that are to be affected in the development of plans.

Until these people are themselves involved in providing the local leadership, most "schemes" are doomed to failure. Thus where local leaders are used as an integral part of the scheme of bringing about change successes are forthcoming. It is only when we begin to question their abilities do we run into troubles. The professional persons sometimes get too far ahead of the leaders and thus loose them and we begin to say that leaders have limitations.

Naturally they have limitations, but that is able why they can be effective. They belong to the group. Because they are members of the group they will be effective if we take into account the pressure placed upon them. They are caught between two faces.

1. Trying to stay acceptable within their own group and
2. Trying to effect changes to the normal pattern of the group.

<u>How to get the help of local leaders:</u> -

1. Recognition of local leaders after they have been selected be given recognition in comparison to other people.

2. Party tour:- Local leaders be taken on tour both within the block and outside to acquaint them with development programmes of the places.

3. Rewards and prizes:- They should be awarded to keep up the spirit in them.

9. Summarization:

Due to urbanisation, Zaminari abolition, adult and universal franchise, spread of education etc., village life has undergone many changes and has become much complicated. Under these changed conditions, some difficulties are encounteded in getting the desired cooperation of a leader.

The leader can be involved in : -

i. Planning and organising village activities.

ii. Assisting in giving demonstrations.

iii. Assisting in getting material for demonstrations and other works.

iv. Making visit to demonstrations or other important places.

v. Holding meetings where views are exchanged.

vi. In securing enrolments.

vii. Reporting results.

viii. Assembling material.

ix. Contribute personal advice.

We can recognise the leaders by -

1. Give publicity to the leaders through newspapers.
2. Ask their advice on important matters and give them responsibilities.
3. Invite leaders for tours.
4. Leaders should be encouraged to give programme and plays.
5. Introduce them to visiting dignitories.
6. Have tours to visit his work?
7. Give them prominance in public meetings.
8. Have personal visit to his home?
9. Personal letters or appreciations.

10. Testing and check-up.

1. What do you understand by the involvement of leaders?
2. What important roles the leaders are expected to play?

11. Reference:

1. A study of leadership by Browne and Cohn.
2. New understanding of leadership by Ross and Henry.

Assignment:-

Draw out a programme for the involvement of leaders in in the development activities of your village.

Lesson Plan No. 23

IDENTIFICATION OF LEADERS

1. Objectives

   1. To acquaint the trainees with the topic so that they may identify the leaders in the field.

   2. To equip the trainees with the knowledge so that they may prove to be good Extension workers.

   3. To clarify the concept so that they take up the Extension of the programme through village leaders.

2. Previous background

   The trainees know the concept, meaning and theories of leadership.

3. Aids to be used

   Blackboard and chalk; flannel board and flannel strips.

4. Presentation

   Introduction

In our previous talk we learnt that leadership in its broadest sense refer to a process where an individual directs, guides, influences or controls thoughts, feelings or behaviour of other human beings. Leadership being an important activity it is necessary that we should learn and know the different methods used for the identification of leaders.

Presentation of new subject matter.

As necessity is the mother of invention, so is about the leadership also. Leaders are the products of group situations. There cannot be a group without a leader. Sanderson says, "Every group has within it the necessary leadership whether acknowledged or potential. Every situation brings to the fore some leadership within the community. It is essential to find and develop that local leadership if the community action has to be taken to solve some problems."

If the Extension worker assumes that leadership is something that exists or does not exist, he may give up and wait till it arises, but he believes that leadership arises out of needs and it can be created and trained, he will persue a very different programme and will try to create a sense of need out of which will grow a demand of action.

While few persons today subscribe to the "great man" theory of leadership, it is unrealistic not to recognise that in any given group some persons are better equipped by virtue of their sensitivity to others needs, their initiative and so on, to serve as leaders, then others in the group.

A leadership development programme which does not recognise this fact stands to have a high failure rate. Courses of various kinds "provide much useful information and valuable contacts, but they can never in and of themselves make leaders....this is because.... leadership at a high level demands certain constitutional and temperamental characteristics which cannot be inculcated by training alone regardless of its thoroughness or pedagogical sophistication. We are in essential agreement that fundamental in the development of leadership are certain aspects of personality and character which the adult has nor does not have. Therefore sound consideration in any leadership development programme is surely the discovery of means by which to identify and develop persons with leadership potential.

Methods of identifying leaders.

First we should answer these questions:

1. What are the jobs?
2. What skills does it require?
3. Who is the person with these skills?
4. Persons who follow him?
5. What skills he has - what can be improved?
6. The skills he lacks - what can be developed?

The methods of identifying leadership can be classified as:

1. Interview method:

   This is generally used in the selection of professional leaders.

2. Evaluation of past records:

   Under this method the past occupational and academic record is evaluated and this method can be employed for the selection of professional leaders.

3. Historical analysis and life histories:

   This also is generally used in the selection of professional leaders where considerable attention is given on the personality traits of the leaders. This may also be used for identifying natural leaders who have participated in making some important public decision.

4. Leaderless group tests:

A group of persons is given a task to perform and it is left upto the persons involved to select their own leaders, keeping in view of job before them.

5. Leader appointed group tests:

Appointing an individual as leader and then observing how well he leads the activities of the members of his group. This is also preferentially used in the selection of professional leaders.

6. Leader inventory:

The job of the leader is analysed and characteristics associated with it are determined and then an inventory is evolved which includes a series of test items on vocational interest, individual characteristics, attitudes and background and training. This is found useful particularly in the selection of extension workers. A short inventory could also be produced for "Specific group leadership" positions.

7. Sociometic tests:

These tests have been found very useful particularly where choices of individual members having a bearing upon their inter-relationship with others. As the choices of individuals go on changing as a result of new experiences, corresponding change also takes place in the leadership pattern of the group. These tests identify leadership patterns only in terms of choices relative specific situations or group experiences. They do not design to measure a vague factor called popularity. Sonogram for the same individual leader will manifest differences when the choices are in relation to different activities.

8. Public identification of leaders:

This method discovering influential persons or natural leaders is one form of a sociometic test whereby a sample of population or key persons of the village or a panel of experts who are the office bearers of village organizations give their choices about the man who "carries weight" or "whose words are counted". This may include following technique:

a) Sample interview: Asking villagers or a sample of population to indicate which one of them is ordinarily consulted for advice on a particular subject.

b) Multi stage interview: Key information or panel of experts and the leaders thus identified are asked to identify the leader.

c) Panel of experts may be asked to identify the leaders.

9. Social participation score:

The method identifies the most active member of a community as leaders. The level and extent of participation can be measured by obtaining the list of members of voluntary or associate organisations of the village.

10. Participation observation technique:

The workers observe a community over a period of time as to who talks to whom, around whom does the crowd gathers etc. who directs and follows whom and to what extent and so on. This is termed as "Observation evaluation method" by Meldered B.Porten and proved successful in reliable measurement of leadership.

5. Summary

The leader emerges as a consequence of needs of a group of people and of the nature of situation within which the group is attempting to operate. There are ten main methods by which we can locate leaders.

6. Testing and check up

1. What are the different methods of identifying leaders?

2. What is socio metric test?

7. References

1. New understanding of leadership by Ross and Hendry.

2. Study of leadership by Browne and Cohn.

8. Assignment

Identify the leader of the Youth club of your village by socio metric method.

.. ..

Lesson Plan No. 24.

DEVELOPMENT AND TRAINING OF LOCAL LEADERS

1. Objectives

   i) To give the trainees knowledge about the development and training of leaders.

   ii) To make the trainees efficient in their job of developing local leaders.

   iii) To give them guidance leading to creative activity and learning experience on the part of the learner.

2. Previous background

   The trainees know the concept and theories of leadership and identification of leaders.

3. Aids to be used

   i. Black board and chart.
   ii. Fiml strips.
   iii. Slides.

4. Presentation

   Introduction

Most professional extension personnel have accepted the principle that local leaders are important in rural development. There seems to be two schools of thought in relation to be use of local leaders.

   i) Extensionists who believe local leaders should be used primarily as demonstrators.

   ii) Those who idealistically believe local people should be primarily taught to instruct others.

However a majority of individuals in either shool of thought feel that the rural families are generally not capable to work as demonstrators or teachers. But the fact is that farm or rural individuals acting as local leaders, can be effective demonstrators or teachers because they come out of the very group which extension is trying to influence. If we have in mind to develop the local leaders.

Principals of leadership development:

1. Selecting men of potential ability.
2. Giving them responsibility.
3. Consistent support.
4. Opportunity for sharing their problems with their peers.

5. Friendship and counsel of an experienced leader. Frequent turn overs.

Steps in leadership development programme:

1. An inventory of possible leaders based on intimate contact.

It is essential that the person responsible for staffing or manning an organisation have wide contact with possible leaders both within and outside the organisation. The "developer" is responsible for a sufficient supply of leaders moving into the organisation, he is responsible for finding satisfying, challenging opportunities for these persons, and moving them, if and when they develop greater capacity and it seems desirable, to positions of greater responsibility either in the organisation or some other organisation. For this purpose he must be constantly allert to persons with potentialities for whom experience in his organisation may prove to be helpful.

2. An adudit of all tasks within the organisation for which the leadership is required.

This involves not simply a listing of jobs and tasks, but again a discriminating list which indicates the specific requirements of each leadership task. The "situational theory" of leadership is useful at this point, for it places emphasis on the various aspects of the situation - the task, the group, the culture which is an essential consideration in placing or assigning leaders. The audit of"leadership positions" will identify specific; of each position, what special characteristics of leadership are required (e.g. initiative, consideration, imagination). The audit should not only list positions for which leadership is required in the immediate future, but also for the time when some of the present leaders move to other positions.

3. Plan strategy for placing and developing leaders.

The essence of this step is that of bringing together the two points mentioned above. The one is an audit of positions for which leaders are required and the second one is the list of persons who might conceivably be available for these leadership positions. Good strategy here calls for the initiation of a programme that recruits persons with ability or potential ability to give leadership in the situations in which leadership is now required or likely to be required.

4. Develop a frame work for appraising groups, tasks and leaders.

This is an essential and critical requirement for a leadership development programme. It is at this point, perhaps more than any other, that some of the research findings of the social sciences have contributed, or stand to contribute, to organise programmes of leadership development. They have provided new conceptual and diagnastic

tools for those concerned with leadership development. It can be said, however, that the use of these tools is dependent upon those responsible for leadership development and only when used by these people, will their full practical value be recognised. The development of the group will require a leader who is specially equipped to help the group in its aspects of work.

5. Development of a programme of supervision.

What is implied here is a face to face meeting in which the leader in training and a professional worker meet to review and evaluate the former's recent experience with his group.

If the relationship is to be an effective and helping one, the supervisor must have understanding of the dynamics of group life, of the function of leadership and of the learning process - particularly the unique way in which each individual trainee learns. The supervisor must discip-line himself so that he interjects himself in the learning situation in a way that supports and helps the trainees as he struggles with his problem, and not in a way which relieves the trainee from this struggle. The essence of this relationship is the nourishment and facilitation of self growth and self development of the trainee, and not the intellectual or abstract solution of specific problems for the trainee.

6. The development of leadership course.

One important aspect of leadership development is the training of leaders. It relate to the leaders need for:

a) Factual knowledge including organisational functions and procedures, resources available in the organi-zation and in the community etc.

b) Understanding of people, their needs and relation-ship, the characteristics of group life, the requirements of leadership in a various types of groups.

c) Developing and using leadership skills. Mc.Murry has stated that numerous skills can be included by formal instruction. He lists the following areas in which the leader may make progress in formal courses:

i) The ability to see problems in broad perspec-tive and to make decisions on the basis of long run rather than short run goals.

ii) The capacity to delegate authority as well as responsibility.

iii) An open minded receiptivity to suggestions and criticisms from peers and subordinates as well as superiors.

iv) A willingness to risk the loss of the approbation and support of others, if necessary, by thinking independently and taking a firm stand.

v) A knack for discovering and utilising previousl. undetected relationships among the things and conditions of his environment.

vi) Competence in carrying on, integrating and coordinating a number of highly varied interests and activities simultaneously.

From the above it is obvious that a leadership development programme is inevitably a complex, time consuming and costly operation.

Objectives of leadership training.

The leadership training is primarily aims at to:

1. Understand fundamental concepts that should serve as a base for interpreting group behaviour, social learning and cultural differences.

2. Develop competence in group process.

3. Acquire necessary skills to carry out a job.

4. Methods of identifying and analysing problems.

Methods of training:

Methods may be of two kinds.

a) Informal - Observation - Reading - talking

b) Formal - Lecture - Discussion and workshop; symposium; and forum; Audio visual aids; Field trips; Apparenticeship; Training groups; Direct assistance from others. Buzy groups giving responsibility to local leaders.

Issues to be considered:

i) Trainee - selection
ii) Trainer
iii) Subject matter or content
iv) Duration - season.
v) Vanue
vi) Financial, material - moral support.
vii) Evaluation.

5. <u>Summary</u>

The development of leadership involves six principles the importance of which need to be emphasised. While deciding objectives and methods of leadership training local situations should be kept in view.

6. Testing & check up

   1. What is the importance of leadership development programme?

   2. What are the different steps in the leadership development programme?

   3. What are the methods of leadership training?

7. References

   1. The study of leadership by Brown & Cohn.

   2. New understanding of leadership by Ross & Hendry.

   3. Group Dynamics by D.M.Hall.

8. Assignment

Prepare a programme for the training of leaders of your block and suggest what methods will be employed for the training.

.. ..

Lesson Plan No.25

GROUP BEHAVIOUR AND LEADERSHIP

1. Objectives

   1. To apprise the class with nature of group and their behaviour in different situations.

   2. To tell the role of leaders keeping in view the group behaviour.

2. Previous background

The class has already been made aware of the individual behaviour in different situations and his relation with the leader.

3. Aids to be used

Flannelstrip and chart.

4. Presentation

Introduction.

The behaviour of individual often varies in group. He is led by the norms of the group.

What is a group.

A group is not a mere aggregate of individuals but it is an association of persons with same degree of give and take, that is, interstimulation and response among the members. So we can define a group as two or more persons in a state of social interaction. It is a social unit of interacting persons.

Sociologists have described certain basic human groupings:

Primary group.

It is characterised by intimate face to face contacts, direct interaction covers a wise range of needs and gratification and has a common locus. The family is this univeral primary group.

Community: Community is congregate of people of all ages and both sexes having views or common culture and living within a restricted geographic locality. The locate is the centre for more of the common interest and action.

Class structure. The class structure consists of a stratified hardship of power distribution in various sub-groups.

Structure of the group: In accordance with the structure, a group can be classified as below:

Formal and informal groups.

In formal group structure, roles and role expectations are firmly pre-determined and are completely independent of a separate form, individual desires or preference. In the formal type the roles tend to be self made.

Group behaviour.

A group is said to exist whenever two or more individuals are in dynamic relationship to one another, so that the behaviour of each is affected by the behaviour of all.

The group mind fallacy.

According to Lebon, whenever, two or more people are gathered together under certain circumstances, they express in their behaviour characteristics which are different from those of each individual separately. This difference is the formula of a collective mind which is a single being and is governed by the law of the mental units of crowds. By virtue of its possessions of a collective mind, a group of people feels, thinks and acts differently from its separate individuals. This psychological group is a distinct being, formed by individuals just as living body is a combination of separate cells.

As a member of this collectivity, the individual derives a sense of extraordinary power which he does not possess as an individual. The group mind is a substance, force, entity over and above the individual which accounts for the latter's behaviour of the individual and mind or behaviour of the group.

Group dynamics.

Although we regard the group as a unit, we do not need to assume that this unit has a mind of its own. The behaviour is the product of the goals and personality make up of the individual members who compose it. The group does not have goals and interests of its own distinct from those of its individuals themselves. The laws which govern the behaviour of the group do not differ fundamentally from those which govern the behaviour of the individual. The togetherness of the behaviour of a group of individuals is due to a circular reaction in which there is a high degree of self intensification in each member of his own excitement as he finds it neglected in other. The process is social interaction.

The basic condition of group behaviour exists when the individual response is shared by other and it becomes reciprocal or interaction and a pattern of mutual stimulation and response.

Group behaviour is thus a function of both the individual person and the social situation.

Conflict.

A recurring phenomenon of inter-personal and intergroup relations is tension. Out of the tensions, of contemporary life rise numerous strifes and social conflicts. This conflict vary from those inherent in the subsconscious competition of business and industrial relations. So the collective aggression of revolution.

Basis of group behaviour.

The factor of motivation: Certain physical needs such as are related to desire for food, for sex satisfaction for personal security as well as need for social prestige and recognition would tend to motivate individuals to join with others in securing such goals.

External and physical environment.

This also influences the group activities.

Power relation.

Group structure is characterised by certain power relations among the members.

Norms: A norm is a standard of measures in bearing on perception, judgement and conduct.

Leadership.

Leadership is mostly discussed in terms of dominence. A leader is a member of a group who possesses and uses relatively more power than other members.

Leadership in formal and informal groups.

Under the formal organisation the status or role at various levels of control or leadership are specified in advance. In the informal and less organised group, interactional patterns are more flexible.

Leadership in group.

The relationship between leader and follower is essentially one of the interactions involving super ordination and subordination. The functions of leadership are just to define the situation and provide certain kinds of symbolic meaning for them to suggest solutions to problems if they are present to decide a solution (the decision making functions) and finally to convey the solution.

5. Summarization

In short the behaviour of an individual in a group is led by various factors as group mind fallacy, motivation,

chemical and physical environment, power relation and norms. A leader is a member who defines the situation and suggest solutions to problem and finally execution.

6. Check up

1. What is a formal and informal group?
2. What are the basis of group behaviour?
3. What is the role of leadership in a group?

7. Assignment

What do you understand by democratic leadership and what are the functions of a leader in a democratic organization?

8. References

1. Social Psychology by Herbert Bonner; Eurasia Publishing House(P) Ltd., New Delhi Chapter 4, Pages 351-378.

2. Hand book of Social Psychology by Kimball Young, Ch.10 and 11 pages 215 to 215.

3. Social Psychology by Theodoro M.New Comb. Chapter V. Pages 486 - 616.

Lesson Plan No. 26

INVOLVEMENT OF THREE BASIC INSTITUTIONS IN AGRICULTURAL PRODUCTION

1. Objectives

   1. To equip the trainees with the knowledge of three village basic Institutions, Panchayat, Cooperatives and primary school.

   2. To give knowledge to the trainees about involvement of the three basic Institutions in Agricultural Production.

   3. To equip the Gramsevak trainees with the knowledge so that VLWs can make best use of 3 basic Institution in Agricultural Production.

2. Previous background

Sh. Jawaharlal Nehru "Every village should have three things - a Panchayat, a cooperative and a school only then can the foundation of the country be strong.

Just as Panchayat is a statutory administrative institution for planning and execution and the cooperatives for economic development of the village, the school will be the strong hold of education and culture of the village.

Organisations of Panchayat, cooperatives and school as Basic Institution and their importance in Extension work has already been discussed.

3. Aids to be used

   1. Blackboard.
   2. Flannel strips.
   3. Charts.

4. Presentation

Introduction.

Subject	Method
There is shortage of foodgrains in the country. A large quantity of food grains is imported to make good of this deficiency. It is disgraceful for our country that where more than 75% people are doing Agriculture, we are unable to produce enough food for our men in the field. For meeting the deficiency some important programme like Intensive Agricultural District Programme, Intensive Area Agriculture Programme, Four Eastern District Programme and	Talk

High Yielding varieties programme have already been taken in the field for rapid Agricultural Production.

But these programmes can be extended to villagers through local leaders, Gramsevaks and more so with the help of three Basic Institutions at Village level, namely Grampanchayat Cooperative and a school. For achieving this goal, it isvery necessary that we create an atmosphere of awakening and patriotism in the public.

Now we are going to discuss the role of the three basic institutions in Agricultural Production.

Presentation.

1. Why a Panchayat in the new set up of Panchayat Raj is the first test point in Ten Test points in Panchayati Raj? It is because of top priority to Agriculture Production. — Discussion. Flannel graph.

2. To offer people the opportunity to express their will and share responsibility.

3. Democracy becomes real and grows its roots when people take active interest in day-to-day function of Panchayat.

Under three tier system, Gaon Panchayat has been provided with two sub-committees for carrying out the function of Gram Panchayat namely:

i) Krishi Gram Utpadan Samiti.

Agriculture productions and other production progress. — Flannel graph. Talk.

ii) Kalyan Samiti - Welfare Programmes.

The following programmes may be taken up by the Panchayat for increasing Agriculture Production.

Programme-planning Agricultural Plan for village.

The Krishi Gram Utpadan Samiti of crop takes up the responsibility of preparing the village plan and particular, Agriculture Production Programme.

Organizational programmes:

1. Role of Krishi Gram Utpadan Samiti in Organizational aspect of Agriculture Production Programmes. — Blackboard.

Pradhan: Members are available to man the organizational set up of Agriculture Production Programme.

2. Organization of campaigns (Rabi, Kharif & Zaid and other special campaigns and programmes including drives).

3. Associated organization like Mangal Dal, cultivation Forum, Rural Reidi Forum etc. to be organized and utilized for Agriculture production.

4. Organization of crop-competitive & throwing of challenges to Gram Sabhas.

Educational programmes.

i) Training of members associated with Agriculture Production. ii) Arrangement of useful literature in Library providing latest knowledge about Agriculture. iii) Study tours can be organised to improve Agriculture farms for showing latest Agriculture practices. iv) Arrangement of Radio listening set should be held in Gramsabha, particularly at the time of Rabi and Kharif sowing. v) Good successful Demonstration be laid out by panchayat in Agriculture practices for convincing villagers at large.	Talk Flannel graph Blackboard.
*Action programmes can be arranged from Gaon fund.	Talk Blackboard.
a) Utilization of compulsory Defence Labour Bank provided under Panchayati Raj Act 1947, Section-19A in the following works:	Flannel graph.

i) Cleaning of irrigated channels.
ii) Compost pits digging.
iii) Mendbundi.
iv) Cleaning of tank for use of irrigation.
v) Drainage system - culverts etc.

b) Arrangement of Plant Protection Equipment.

c) Installing of pumping plants, Rehats etc.

d) Arrangement of power implements, tractor etc.

e) Utilization of waste land by:

i) Digging compost pits, and
ii) Tree-plantation.

f) Cattle breeding by having good bulls.

Cooperatives. Cooperatives are necessary for economic development in the village.	Talk. Flannel graph.

a) What is a cooperative?

i) Big family becoming bigger (Jawaharlal Nehru)
ii) Joint family type
iii) Self-help, mental help and thrift
iv) Each one for all and all for each.

b) Increase in Agricultural Production through cooperatives.

To increase the Agriculture production is our National problem. When the production will increase the income, standard of living will also develop. We have seen that if we want to increase the Agriculture Production we want the following things. Cooperative plays vital role in the rural economy. Community Development Programme includes the development of rural economy in its programmes. This can only be done through crops. As such, we may say the cooperative has got very important place in community development programme. — Talk

Financial assurance to cultivators.

We can provide finance through cooperatives in the form of:

i) Short-term loan; ii) Medium term loan; and iii) Long-term loan.	Service cooperative.	Flannel graph Talk.

Consolidation of holdings.

By organizing the cooperative farming societies. It helps in increasing the agricultural production.

Minor irrigation.

Minor irrigation Projects are also very essential for Agriculture Production. These minor irrigation projects can be constructed by taking the long term loan.

Irrigation societies can also be formed to undertake these projects as Irrigation is source of our cultivation.

Supplies of Seed, Fertilizers, Implements and Insecticides.

Better seed, fertilizers, implements, insecticides help in increasing the Agriculture production and these things are being provided by the Service cooperatives, through Agriculture production plan as a basis of loaning.

Better live-stock.

Cultivators may purchase better livestock for their cultivator by giving the medium-term loan from the societies. Better bullocks will also help in increasing the Agricultural production.

Marketing-societies.

For marketing of the produce of the cultivator members.

Finance plays a very important role in our Agriculture, which is provided by the cooperative societies. Besides it we can provide seed, fertilizers, implements and insecticides etc.

Village Primary school.

According to Sh.T.T.Krishnamchari,"Education is the key to progress and development. It is an index by which we can judge whether a country is developing or not".

"Education is a process in Agricultural Extension for changing mental outlook of the people. The institution of school can be best utilized in the following manner in Agricultural Production.

School as an Extension Agency.

Agricultural Production Programmes can be taught to the boys in school and the boys carry the information about these programmes to their parents. Teacher and children can work as an effective agency for Agricultural Programme.

School as an Information Unit.

School teacher can give information regarding latest varieties and practices in Agriculture through:

a) Adult-classes & discussions.
b) School library service.
c) Publicity by spreading knowledge to villages.
d) Group meetings.
e) Cultural programmes and folk songs.

Coordinating in Action Programmes in Agriculture. — Talk Blackboard.

i) Kitchen gardening - Supply of seed and vegetable seedlings.

-Boys growing vegetable plots individually.
-School vegetable plots.

ii) Composting programme - Model in school.
-Boys to maintain in Home.

iii) Agricultural Demonstration. -On school land like dibbling etc.

iv) Plantation -On school and on individual plots.

v) School garden scheme under A.N. programme. -Vegetable growing; poultry-keeping.

Teacher's new role.

Act as guide and philosopher to cultivators in the field of Agriculture Production.

School Farm as Model Farm.

All improved farm practices with seed multiplication of High Yielding Varieties of wheat etc. It will:

i) Fetch money for school farm; and
ii) Seed multiplication will give seed of good varieties to village cultivators.

5. Summarisation

Village is like a family, where Panchayat works like father and represents the will of the entire village, cooperative society works like mother and school like a family Purohit. Small groups (associate organization) are like children and they all reflect specialised interests "youth club", Mahila mandal and Krishi samiti. — Talk Discussion.

6. Testing & check up

Questions Answers.

1. What programmes should be taken up by Panchayat to increase Agriculture Production?
2. How agriculture production may be increased through cooperative societies?
3. How a school can be involved in Agricultural Production?

7. References

1. U.P. Panchayat Raj Act 1947 Section 15 & 16.
2. Talks given by Sh.Bhagwant Singh, I.A.S.,Ex-Director of Panchayat, U.P.

3. Village Level Worker to the cooperative Movement (Publication of Govt. of India).

4. Three Basic Institutions - by Ministry of Community Development and Cooperation.

5. Our village Panchayats by H.D.Malviya - Chapter I & IV.

6. The service cooperatives by M.C.D.C. Govt. of India.

8. Assignments

Trainees to come prepared for the next class with particulars on how the associate organization - youth club in particular Mahila Mandal & Farmer's Forum are organized and are being helped by three basic institutions. A note on compulsory functions of Panchayat regarding Agriculture should be prepared.

Lesson Plan No: 27

INVOLVEMENT OF RURAL YOUTH CLUB IN AGRICULTURE PRODUCTION

1. Objectives:

1. To equip the trainee with the knowledge of Rural Youth Club as an associate Organization of village.

2. To give knowledge to the trainee about the involvement of Youth Club Organisation in increasing Agriculture Production.

2. Previous background of lesson taught:

1. The trainees have learnt about the involvement of three village basic institutions (Panchayat, Cooperative and School) in Agriculture production Programmes and need and organization of Rural Youth Club as an associate organization.

2. Trainees have learnt the aims and objectives of joint organisation and they understand that the youth members are the future farmers of India.

3. Trainees also know that the youth organisation has been started to develop the scientific attitude.

3. Aids to be used:

1. Black board.
2. Suspense chart.
3. Flash-cards.
4. Chart.

4. Presentation of topic:

A. Introduction:-

Subject:-

Method and Media
Talk/Black Board.

In the concept of the community development programme of the country, the importance of rural youth club cannot be over emphasized. The youth should so trained and organized as to participate in the total plan of development.

Rural Youth individually and in groups play a very dominent role in the activities which lead to increased Agricultural Production and community development. It is a great reserve of human talent ability. Youth are much more energetic and receiptive to accept new ideas and — Talk

to work on new programmes. They have great influence on their parents for accepting new and improved practices by demonstrating the practice on their own farm. The youth club by taking up proper projects, can improve economic and social life by application of science and technology. Some of the aspects of socio-cultural and agro-economic are popular with youth organizations. Rural Youth organization can be involved in Agricultural Production programmes as follows:-

B. Presentation:-

i. Educational programme:-

Youth club can organize the following educational programmes. Talk / Susponso chart.

ii. Study tours and visits to places of Agriculture importance to youth club members for seeing the improved agricultural practices on Agricultural Research Station, outstanding Block fields. Farms of progressive cultivators etc.

iii) Training of youth members in new Agricultural practices and latest varieties of improved seeds.

iv) Arrangement of literature including magazines and books on Agriculture Programmes in youth club library.

v) Arrangement of Rural Radio Forums and Charcha Mandals, particularly at the sowing time of Rabi & Kharif compaign.

vi) Successful demonstration in Agricultural practices for members.

2. Organizational Programmes:- T...-Flannel graph.

i) Rural youth organization can organize Rural Melas for showing Agricultural activities through exhibitions.

ii) By organization of sharamdan for digging compost pits, construction of Kucha well for irrigation, cleaning of tank of irrigation and digging of Nala for taking out the water from water logged areas.

iii) Participation in organization of special drives of minor irrigation works, composting programme vegilable-growing seed-multiplication etc.

Action Programme:- The main projects which can be executed by Youth Club for Agricultural Productions ;

i) Improved seed and seed multiplication.

2. Green manuring.
3. Plant protection measures.
4. Improved cultivation practices.
5. Seed treatment programme.
6. Green manuring.
7. Compost pits.
8. Minor land reclaimation works.
9. Use of chemical fertilizer.
10. Dry farming practices.
11. Improved Implements.
12. Vegetable nursery for kitchen garden.
13. Horticulture-vegetable growing.
14. Growing of crops of wheat, Maize, Paddy, Bajra etc.
15. Fruit growing-papaya, Banana, Grape, citrus plants and pineapple.
16. Plant protection measures i.e. Rat control, storage of grains and seed treatment.
17. Animal Husbandry: Poultry breeding, calf rearing, Goat and Sheep rearing, Growing fodder etc.

Publicity programme:-

Rural youth club members can do the work of publicity and informations regarding Agricultural Practices as follows:-

1. Adult literacy classes for cultivators.
2. Youth rallies.
3. Cultural activities:

Drama, Folk dances, one act play, Lok geet, Parsar geet, Puppet show and shadow plays etc.

4. By establishing an information Centre for cultivators.
5. To give latest information about Agricultural practices and experiences on projects of Agriculture, in the meeting of Gaonpanchayat and meeting of Krishi and Utpadan Samiti.

5. Summarisation

Thus we have seen that youth club can do the following jobs for Agricultural productions.

1. Education programmes.
2. Organizational programmes.
3. Agricultural Action Programmes.
4. Publicity programmes.

6. Testing and check-up.

The following questions/will be put to the trainees for testing knowledge:-

1. How can you involve rural youth clubs in Agricultural production?

2. What are the Action programmes in Agricultural production, a youth club can take up?

3. Give important Agricultural projects which can be taken up by a youth club.

7. References:

1. A guide to rural youth organization , PRAI Lucknow.
2. Rural youth hand book - Trainees Mannural - M.C.D.C. Govt. of India.
3. The 4-H club leaders handbook, T.T.Martin, Harper and brothers, New York 1956, Chapter III Pages 33-34.

4. Strategies of Leadership by A.A. Liviregh. Horper and brothers , New York-1959, Chapter 9 pages 95-106.

8. Assignment:

When you go for village practical, please study the programme of Agricultural Production which are being done by youth club. A list of such Agricultural programmes be brought from Village-visits.

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Lesson Plan No: 28

INVOLVEMENT OF VOLUNTARY ORGANISATION LIKE BHARAT SEWAK SAMAJ, FARMER'S FORUM AND MAHILA MANDALS IN AGRICULTURAL PRODUCTION PROGRAMME.

1. Objectives:

1. To make aware about the involvement of volunteer organisation in Agricultural Production Programme.

2. Role and function of Bharat Sewak Samaj.

3. How to get cooperation from these organisations?

2. Previous back-ground of the lesson taught:

Involvement of three basic Institutions-Panchayat, school and cooperative and youth club in the Agricultural production programme.

3. Aids to be used:

Flannel strips.

4. Presentation of the topic:

Introduction:-

Agricultural production programme requires not only requisite materials but a great deal of cooperative efforts of personnel as well as organisation to involve itself in spreading of new knowledge and skill. Voluntary organisations like Bharat Sewak Samaj, Farmer's Forum and Mahila Mandals can also assist in speeding up the production programme.

Presentation of the new subject-matter:

1) Involvement of Farmer's Forum:

It is a non-political organisation. It was organised in November 1954. The aim of the Forum is (i) to give voice on the farmer's national and economic issues.

ii) To study the laws regarding farmers and to give suggestions on it.

iii) To keep eye on the price fluctuation of the various farm commodities.

iv) To advice the Government of India at the time of fixing quantity of export and import goods of Agricultural Production for commercial purposes.

v) To inform the farmers, businessmen, states and other connected persons on the problems and policies of agriculture.

Keeping the above aims in view, it is obvious that those farmers, who are active members of the Forum can get valuable informations regarding agricultural production. Govt. policies, prices of Agriculture commodities and problems can be approached through this organisation easily.

The Forum can be organised at various level, according to its constitutional provision viz-state level, District level, Block level and Nyaya Panchayat level.

A magazine named "Forum News" in Hindi and English is published by the Forum. Through this paper the Forum can extend new farm knowledge also.

Involvement of Bharat Sewak Samaj:

Bharat Sewak Samaj is also a non-political organisation. It has been organised at the central level and its units are working at state and District levels.

The main aim of the Samaj is to provide service, cooperation and create unity and self-sufficiency to the society.

To achieve this aim the Samaj Launches the following agricultural and allied activities.

1. Digging of compost pits by Sharamdan.
2. To build pacca and kaccha road.
3. To collect money for defence and small saving purposes.
4. To organise library and reading rooms.
5. Plantation.
6. Cinema shows.
7. Social conservation work.
8. To organise training camps for young boys.
9. Cleaning of Guls for irrigation.
10. To organise study circles on different subjects and problems.
11. To organise community centres.
12. To propagate improved methods of cultivation.
13. To build Godowns for crop produce.

The above list of activities is very encouraging for an extension worker. With the help of the Samaj, various activities can be mobilised towards agricultural production, where as some of them are directly related - to agriculture such as soil conservation, cleaning of guls, and propagation of improved cultivation programme.

Involvement of Mahila Mandals:-

Mahila Mandal is a rural women organisation. These mandals have been organised mostly in rural areas by the women

extension workers of community development blocks.

The aim of the Mandal is to provide village woman folk plateform for community thinking, planning and working woman welfare activities for themselves. The Mahila Mandals can be involved in the following agricultural production programme.

1. How to treat different seeds.
2. Handling of simple kitchen garden tools and equipments.
3. Improved systems of storage.
4. Raising of nurseries like paddy, vegetables and fruit plants.
5. Vegetable growing for family use and maintenance of kitchen gardens.
6. Simple knowledge of preventive measures for animal diseases.
7. Knowledge about plant protection medicines and if the above activities be mobilised the members of the Mandal can be involved efficiently in Agriclture production programme.

5. Summarising:

The Farmer's Forum, the Bharat Sewak Samaj and the Mahila Mandals are voluntary and non-political organisations at various programme unit levels. Agricultural production programme includes many phases. At various phases these organisations can be involved at least in educational, publicity and seeking cooperation as well as in action phases such as seed treatment, handling of equipments and storage etc.

6. Application:

The village level workers will take help of these organisations in their operation areas:

7. References:

1. Annual progress report of 1963 (Hindi) of Bharat Sewak Samaj, Uttar Pradesh, Branch.
2. A note on "Farmer's Forum" constitution.
3. Vikas Nawneet - Agricultural production commission and Rural Development, Uttar Pradesh.

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Lesson Plan No. 29

WHAT IS TEACHING AND LEARNING PROCESS AND ITS IMPLICATIONS IN EXTENSION PROGRAMME.

Objectives:

i) To acquaint the trainees with teaching and learning process.

ii) To make them understand its implications in Extension programmes.

Previous background of the lesson taught:

The trainees have already gone two years training in extension education and other allied subjects and have worked for a number of years in the field.

Aids to be used:

a) Chalk and black board.
b) Detailed notes.
c) Suspense chart.

Presentation of the topic.

Introduction :

	Method to be used.
Recapitulation of the past experiences of trainees through questions and answers.	The trainees will recapitulate their experiences on the subject and try to be in a knowledge mood.
Q.No.1: What books have you read on this subject?	
Q.No.2: What do you understand by teaching and learning process.	

Presentation of the subject matter:

Definition of learning is a process by which an individual, through his own activity becomes changed in behaviour.	By writing the definition on the black board.
Why people learn: Motivation is basic factor. They are motivated to learn and they can satisfy a basic need.	With help of a suspense chart it will be shown.
a) Desire for security economic, social psychological and spiritual security.	

b) The desire for experience adventure, new interests, new ideas, new friends and new ways of doing things.

c) Desire for affection or response companionship, gregariousness and social mindedness, the need for feeling of belonging.

d) The desire for recognition status, prestige, achievement and being looked upto.

The facts will be supported by examples on human beings.
i) Desires are achieved by knowing the world and its working.
ii) Unguided experience cannot teach us.

Definition of teaching: -

It is the process of arranging situations that stimulate and guide learning activity, towards goals that specify desired changes in the behaviour of people.

Elements involved in teaching:-

i) Something to be learnt.

ii) The action by which the student learns it.

iii) Degree of students receptivity depends upon his adjustment, motivation and readiness.

Conclusion:-

Teaching steps up the learning process in an organised manner i.e. in perception, conceptualisation and memorisation followed by try out, practice and adoption.

By examples of some agricultural techniques improved seed, fertilizers.

Implications in the extension programmes :-

1. Helps the people to realise their needs.

2. Creates interest in them.

3. Creates confidence.

4. Creates desire.

5. Convinces them of the improved methods to be applied to fulfil their needs.

6. Makes people try out and practice.

7. Gives them a sense of satisfaction.

8. Enables them to adopt the techniques. In this way when the percentage of adoption of the research techniques is increased, development is affected.

Application :-

While developing the programme in a village the trainees should keep the above facts in their mind and present themselves according to the analysis of a particular situation before the village people.

Summarisation: (Brief touching the main points)

1. What is learning?
2. Why people learn?
3. Definition of teaching?
4. Elements involved in teaching?
5. Conclusion.
6. Implication in extension programme.

Testing and check up:

1. What is learning and teaching process?
2. Why do people learn?
3. What are the elements of teaching?
4. How it helps our extension programmes?

The trainees will be asked questions and to narrate the salient points.

Assignment:

Write an essay on what is learning and teaching process.

References:

1. Extension Education in Community Development [illegible]ion, Ministry of Food, [illegible]. Govt. of India, New Delhi.
2. Basic concepts of teaching by Woodruff.

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Lesson Plan No. 30

PRINCIPLES OF TEACHING AND THEIR RELATION WITH EXTENSION PROGRAMMES.

Objectives:

i) To acquaint the trainees with teaching principles.

ii) To make them understand its relation with extension programme.

Previous background of lesson taught:

The trainees have already undergone two years training course of Gramsevak Training Centre and have got field experience.

Aids to be used.

i) Chalk and black board.
ii) Detailed notes.
iii) Suspense chart.

Presentation of the topic.	Method to be used.
A) Introduction:-	
Recapitulation of the past experiences of the trainees through questions and answers.	The trainees will reply according to their present background.
Q.No.1:- What do you understand by teaching?	
Q.No.2:- What principles are involved in teaching?	
Definition of teaching:- It is a process of arrangeing situations that stimulate and guide learning activity towards a goal.	

B) Presentation of the new subject matter.

1) Principles of teaching:-	
a) Intellectual process	It will be exposed with the help of a suspense chart.
b) Changes in knowledge, skill and attitudes interest and understanding.	
c) Effective communication.	
d) Content and method.	

e) Use of major sense of people.

f) Learning situation.

g) Effective learning experience.

If the learner has not learnt the teacher has not taught!

ii) Factors affecting teaching process:-

a) Individual differences.

b) Motivation.

c) Interests and attitudes.

d) Permanent and meaningful.

e) Transfer and application.

f) Social psychology.

It will be written on the black board.

iii) Application:-

The trainees will be told to incorporate these principles while working as extension education workers amongst the village people during their contacts.

iv) Summarisation and recapitulation:-

Principles of teaching and factors effecting teaching will be summarised by asking questions and getting answers from the trainees.

Testing and check up:

The trainees will be asked the following questions:

1. What are the Principles of teaching?

2. What are the factors influencing teaching?

The trainees will be asked to narrate the salient points.

References:

1. Extension Education in Community Development - by J.Paul Leagans.

2. Basic concepts of teaching - Woodruff.

3. Booklet of principals Training camp from Extension Education Institute, Nilokheri.

Assignment.

Write an essay on the principles of teaching.

Lesson Plan No.31

PRINCIPLES OF LEARNING AND THEIR IMPORTANCE IN EXTENSION PROGRAMMES

1. Objectives

   1. To equip the trainees with the Principles of learning.

   2. To make the trainees understand the importance of principles of learning in Extension programme.

2. Previous background of the lesson taught

   The trainees have undergone two years training in development work at Gramsevak/sevika Training Centres and have got field experience also during their service.

3. Aids to be used

   1. Chalk and black board. (2) Detailed notes 3. Suspense chart. (4) A film entitled 'Accents on learning' U.S.I.S., New Delhi.

4. Presentation

Introduction.	Method to be used.
I. Recapitulation of the past experiences of the trainees will be done by asking the following questions:	The trainees will try to recapitulate on these subjects. They will lend their attention towards knowing more about these.
a) What literature you have consulted on the above subject? b) What do you mean by learning? c) What are the principles involved? d) Definition of learning: It is the process by which an individual through his own organised effort changes his behaviour.	
II. Presentation of subject matter Principles of learning:	
a) It is growth like & continuous. b) It is purposeful. c) It is challenging & satisfying d) It is an activity which engages a number of senses.	These items will be illustrated with the help of a suspense chart.

e) It is affected by physical & social environment.
f) It must result in functional understanding.
g) It requires several exposures.

Factors influencing learning.

1. Goal is determined.
2. Level of aspiration.
3. Knowledge of success and error.
4. Understanding.
5. Age of the learner
6. Capacity to learn
7. Effect of physical & social environment.
8. Learning is affected by emotions.

It will be written on the black board.

Its importance in Extension programmes.

1. The role of V.L.Ws as a teacher.
2. The role of VLWs. as motivator.
3. Helping the farmers in fixing their goals.

III. Application

While working with the village people the VLWs as Extension workers should keep the principles of learning in their mind and device their methods of approach accordingly. They will be asked to formulate such situations where the above factors are not feasible.

5. Summarising & recapitulating

Principles of learning and teaching will be recapitulated as written on the suspense chart.

As regards factors affecting learning and importance in extension programme questions will be posed regarding goal, aspirations, knowledge, understanding, age, capacity, environment, emotions etc.

Asking questions and getting answers from trainees.

Q.1. What are the principles of learning?

Q.2. What are the factors affecting learning?

Q.3. What is its importance in extension programme?

6. References

1. Extension Education in Community Development, Directorate of Extension, Ministry of Food,& Agriculture, Govt. of India, New Delhi.

2. Basic concepts of teaching by Woodruff.

3. Mcknown, Harry & Roberts - Audio-visual aids to Instruction.

4. Iands, Lester - Visual procedures in teaching.

5. Dekieffer & Cochran - A Mannual of Audio-visual techniques.

6. Wittich, Arno & Schuller - Audio-visual material and their natureand use.

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Lesson Plan No.32.

COMMUNICATION PROCESS AND PROBLEMS RELATED TO IT .

Objectives:

i) To acquaint the trainees with the process of communication.

ii) To make them understand the problems confronting communication with respect to village people.

Previous background.

The trainees have already marked in the field side by side they have undergone two years training at Gramsevak Training Centre lavel in development work.

Aids to be used:

i) Chalk and black board.
ii) Detailed notes.
iii) Suspense chart.
iv) Reference material.

Presentation of the topic.

A) Introduction:-

Recapitulation of past experiences of the trainees and problems generally confronted within communication through questions and answers.

The trainees will recapitulate their experiences and try to pose problems. They will be made to say by arguments that this is a must and hence they shall develop their receptive mood towards the subject.

Q.No.1: What has been your sources of information on the subject?

Q.No.2: What are the problems that you have faced?

Q.No.3: Do you feel it is very important in your work as an extension worker?

Presentation of the new subject matter.

What is communication:-

It is a process by which a communicator helps others

Black board.

to gain ideas, facts, feelings, impressions etc. in a manner that the receiver gives clear under-standing of the meaning intent and use of the message.

It is a conscious attempt to share information, ideas and attitudes. It is a process by which two or more people exchange ideas, facts, feelings or impressions for common understanding of it.

Good communication is the essence of good teaching:

Communication process:-

(A) The act of communication:-

i) Expression
ii) Interpretation
iii) Response

It will be illustrated by a suspense chart.

(B) The elements of communication:

i) Communicator
ii) Audience
iii) Channel
iv) Message
v) Treatment

(C) The process of communication :

Skillful communicator sending a useful message, by proper channels, effectively treated to an appropriate audience.

i) A good communicator.
ii) A good message.
iii) A good treatment of message
iv) Good selection of channels and their use.
v) A good audience.

Problems of communication :-

1) Language
2) The meaning of words.
3) Being specific.
4) Organising messages.
5) Using communication channels.
6) Knowing audience.
7) Developing an understanding of facts.
8) Facts, importance and relationship.
9) Questions.

Application :-

The trainees will be told to keep the above facts in mind while dealing with the organisation of communication programmes with villagers.

The trainees will be asked to narrate salient points only.

Summarisation:

The trainees will be told the salient points of the lesson.	By question and answer method.

Q.No.1: What is communication?

Q.No.2: What do you mean by communication process?

Q.No.3: What are the problems in communication?

Testing and check up.

As above the questions will give an idea to what extent the trainees have followed.	Question and answer method.

References:

i) Extension Education in C.D. by Directorate of Extension, Ministry of Food, Agriculture, Govt. of India, New Delhi.

ii) Dale, Edgar - Audio visual methods in teaching.

iii) Brown, James and Lewis- Audio visual instruction, material and methods.

iv) Haa and Packer - Preparation of Audio Visual Aids.

v) Kinder, James - Audio visual material and techniques.

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Lesson Plan No. 33.

PROGRAMME PLANNING, CONCEPT, OBJECTIVE AND PRINCIPLES.

Objectives :

- To acquaint the trainees about the concept, objective and principles of programme planning as he is friend philosopher and guide of the villagers.

Previous background.

Various roles of extension workers. have been discussed in the class.

Teaching aids :

Black board.
Suspense charts.
Proforma of crop plan etc.

Presentation of the topic :

Introduction :-

Importance of programme planning will be discussed by asking questions as to how will you get maximum benefit out of your resources, or what happens when programme is not planned in advance?

Assumptions :-

i) We assume that there is gap between what ought to be and what is?

ii) We also assume that with the combined effort of the extension agency and villave people this gap can be filled up.

Concept of programme planning:-

"An extension programme is a statement of situations, objectives, problems and solutions."

Kelsay and Hemes.

Programme has also been defined as a composite product which emerges as a result of engaging in the process of both asking and answering several closely related and important questions."

We can define programme "It is a well thought schedule of action to be performed within a given period.

A plan is an outline of activities so arranged as to enable efficient extension of the entire programme.

Now we can define the programme planning as such, It is a systematic and continuous process of taking decisions on action to be performed, methods to be applied, human and physical resources available and to be utilized to attain certain objectives within a given period.

Component parts of programme planning:-

i) What to be done?
ii) How?
iii) Why?
iv) By whom and
v) For whom.
vi) Where to be done?

Why programme planning:-

i) It gives line of action.
ii) It can be discussed and modified.
iii) Gives idea of resources.
iv) Creates confidence.
v) Progress can be measured.
vi) Maximum out put from the given resources is possible.
vii) Maintains continuity.
viii) Develops local leadership.
ix) Increases efficiency.
x) It gives guidance.

Objectives: - Objectives can be classified as :-

a) Overall objectives:-

Burton has called it remote or all inclusive objectives or fundamental objectives. They are the same as the objectives of Community Development. All round development of the Community and individual; to change the behaviour, skill and thinking of the people and to develope democratic ideas etc.

b) General objectives:-

To increase overall production of the Community; to educate people how to increase production and to help village people for better home living.

c) Specific objective or working objective :-

To increase the production of wheat per acre by using high yielding varieties of seed, by using more fertilizers better irrigation etc.

Principles of programme planning :-

a) " Objectives must be clear. It is said that for him who knows not to which port he is bound no wind can be favourable." The planners must know as clearly as possible that where they are to go and what they are to do?

b) It should be educative.

c) Start from the level of the people.

d) Know the felt need of the people.

e) Involve all those in the process of programme planning at all levels, who are directly or indirectly to be benefitted by it.

f) Programme planning is a continuous process.

g) It should be corelated. That is family plan should have some relation with the village plan, village plan with block plan, and so on and so forth.

h) Programme must be flexible with a strong back bone.

i) Programme planning should be such that the local resources are fully utilized.

j) Give due recognition to local leaders.

k) It should be written.

l) Planners must have high level of professional efficiency.

m) In programme planning methods of evaluation of the programme, method, workers should be specifically mentioned.

n) Major problems and their solutions should be clearly given in programme planning.

Summarisation :

i) What do you mean by programme planning?

ii) State five principles of programme planning?

Assignment :

Study a proforma of crop plan given to you and explain how far it fulfils the specific objective of programme planning.

References:

i) Extension Education in Community Development Chapter VII and VIII and XIII.

ii) Kelsey and Hearne - Cooperative Extension Work Page 133 to 150.

iii) Methods and programme planning in rural Extension by J.M.A. Penders. H. Veenman and Zenen.

iv). Rural Community Organization by D. Sanderson and R. Polson.

v) Guide to Community Development. Ministry of C.D. and Coop. Govt. of India.

vi). The Planning of change - by Bennis, Benne and Chin pages. 18 to 28.

vii) Collapse of Automatic adjustment by William U. Sharloy. Pages 28 to 34.

viii) From Trial and Error to Planning by - Karl Mannheim. Pages 34 to 38.

Lesson Plan No. 34

STEPS INVOLVED IN PROGRAMME PLANNING

1. Objectives.

1. To explain the various steps in programme planning.
2. To explain how a practical programme planning can be done in the field.

2. Previous background of the lesson taught:-

The concept, objectives and principles of programme planning has already been explained in the class.

3. Aids to be used:

1. Black board and chalk.
2. Suspense chart.
3. Simple charts.

4. Presentation of the topic:-

Introduction:-

The topic will be introduced by putting simple question e.g.

i. What are the objectives of programme planning?
ii. What are the main principles of programme planning?

Presentation:- These are the following steps in programme planning. 1) Preparatory stage:

a) Define objective.

Objectives of the programme planning should be clearly defined, discussed and explained. While defining the objectives we should try to clear the followings.

1. Who are going to be benefitted by the programme planning.
2. What we are going to do?
3. What will be our method?
4. What will be the area of excution?
5. What is the time limit?
6. Why the programme of planning is essential?

2) Step - survey:-

1. Collection of data. The data should be collected on scientific line. The source of data collection should be authentic. If we are going to prepare a crop plan for particular family of a village we should collect the following data:-

Year - Kharif - Rabi and Zaid.

Name of the farmer -

Name of the village
Block
District.
Total area under cultivation:-
Area under Kharif.
Area under Rabi.
Area under Zaid.
Total irrigated area.
Unirrigated area.
Sources of irrigation:-
Canal, tube-well, electric pumping sets, diesel pumping sets, rahat, masonery well.
What are his present practices:-
How much area is covered by various crops:-
e.g. Kharif - Paddy
Jowar
Bajra
Maize
Rabi - Wheat
Barley
Gram
Others
Zaid - Various crops of Zaid.

Improved seed:-

Available with farmers.
Required from outside.
Requirement of chemical fertilizer.
Requirement of pesticide.

Total expenditure:-

How much the farmer is ready to spend? How much loan or taquavi is required to meet total expenditure of the crop plan?

Sources:-

For the practical programme planning our data should be reliable and authentic. We can collect the data from the following source.

1. From the farmer:-

Whose crop plan we are going to prepare? For this we should have him in full confidence.

2. We can get data from the village records of the Patwari or Lekhapal or from Tahsil headquarter.

While collecting the data we should also study the farmer himself. His present socio-economic status. How far he is or we can make him ready to leave present practices, and to adopt new. Is he ready to take risk, is he ready to make more investment, in terms of money and human labour etc.?

3. Step - After collection of data, work should not be immediately started. All the collected data should be carefully analysed. At this stage high technical proficiency of the planner is essential. Services of experts should be utilized.

4. A training of the farmer should be organized.
5. Extension of the whole plan.
6. Last stage is evaluation and comparison. Show the economics of the whole programme.

If we have to prepare a village plan we should the following steps:-

1. Define objectives.
2. Survey, collection of relevant data.
3. Analysis of the data by experts.
4. Analysis and finding out the felt needs of the village people.
5. Take advise of the expert.
6. Tell all about the programme so that it can be discussed by the village Panchayats and all other formal and informal groups of the village.
7. Invite local leaders and try to get their active support in planning the programme.
8. Classify the needs in the following category:-

a) Needs of the family.
b) Common needs of the village people. Over which there is general Agreement.
c) Such needs of the village which can be satisfied by the resources of the village.
d) Such needs for which outside help is necessary.

9. Fix up priorities:- Know that ' nothing succeeds like success and nothing fails like failure." First of all take up such things which satisfy immediate needs and can be completed with the help of local resources.

10. Divide responsibilities as to who will do what?
11. Arrange the training programme for the worker.
12. Arrange training programme for the farmers.
13. Let the programme go ahead in a coordinated manner.
14. Check up the programme - Evaluate it. See, it is moving in the right direction to achieve the goal or not.
15. If the programme is not moving towards the desired end. call the meeting of extension workers - local leaders - experts and of others who are concerned with the programme. Discuss and make necessary changes at the right moment, e.g.
    a. Change in personnel.
    b. Change in technique.
    c. Change in material tools.

16. For the successful programme planning the following is a must:-

a. Supply:- It should be timely, adequate and quality must be ensured.

b. Technical help should be given at the right place and at right moment.

c. Make proper arrangement for the supervision of the programme.

d. Involve the village institutions e.g. village Panchayats, Cooperatives and village schools in the programme planning.

5. Conclusions:-

In programme planning steps are very important factors. There can be some variations in the steps to be followed according to the local conditions. But on some points there is common agreement; such as:-

1. Collection of data and their analysis.
2. Preparation of the plan with the help of local leaders and experts.
3. Excution of the plan.
4. Follow-up.
5. Evaluation and change if desired.

6. References: -

1. Cooperative extension work. L.D. Kelsey and C.C. Hearne.

2. Methods and programme planning in Rural Extension J.M.A. Penders. H.Veen Man and Zenen.

3. Rural Community Organization. D. Sanderson and R.POLSON.

4. Guide to Community Development, Ministry of C.D. and Cooperation, Govt. of India.

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Lesson Plan No: 35

PROBLEMS IN PROGRAMME PLANNING

1. Objectives:

To explain the trainees what are the problems which come in the way of programme planning and how we can solve them.

2. Aids to be used:-

Black board and chalk.

3. Previous background:-

Concept, objectives, principles and various steps in programme planning have explained in the class. Method of evaluation has also been taught.

4. Presentation of the topic:-

a. Introduction: -

1. What is the importance of evaluation in programme planning?

2. How will you judge that the changes have ocurred in the society?

b. Presentation of the new subject-matter.

Problems can be defined as the difficulties are all those factors which are to be solved in the achievement of any objective. These problems can be classified as:-

1. Human factors.
2. Economic or material factor.
3. Time factor.

Human factor:-

Human factor is the most important factor in any problem solving process so is the case with programme planning.

Some of these human problems are annumerated below:-

1. Stratified village society:-

It is mostly caste system. In a particular village a number of caste live. Some times it is very difficult to set in such objectives which can be acceptable to all the village people.

2. Lack of community feeling.

3. Lack of group thinking.

4. Defunct village organization such as village, Panchayats, cooperatives, village schools, and Block Samities. It is very difficulty in these meetings to get the quorum complete. Members of these organization do not take interest. They do not understand the group problem as a whole.

5. Inefficient extension agencies due to lack of initiative, understanding and proper training.

6. Inefficient, undemocratic in thought and action, democratic organization. This organization, which is the most strong organisation is unwilling and non-cooperating in nature.

7. Complacency.

8. Lack of supervision and proper guidance.

9. Misguided, selfish and short sighted village leadership.

10. Correct data not available.

11. Lack of coordination in different agencies e.g. between extension agencies, revenue, cooperative, Agriculture, Irrigation and hydel all these department have no relationship. They are separate identity. Even District Magistrate is unable to bring them on one line. They are not working for the people but for their departmental rules and acts as if they are the end in themselves and unless these department work in complete coordination no plan can be framed or implemented.

Economic and material difficulties:-

1. Lack of communication.

2. Supply line is de fective both in quality and quantity and does not approach in time.

3. Poverty and ignorance.

4. Taq avi and loan rules are so complicated that the farmers are unable to understand.

Time factor:-

Sometimes, time is not available because in the beginning programme planning is time consuming factor.

How to solve these problems:-

1. We cannot go back from the democratic step, we have already taken. Therefore we should give real power in the hands of village panchayat and Block committees. We should be responsible for their plans. Only by giving responsibility we can make them responsible.

2. There should be complete coordination in Govt. Departments. I cannot suggest better way than to quote the report on India's Food crisis and steps to meet it by the Agriculture Production team sponsored by the Food Foundation. We would like to emphasize that at each level, agencies and officers should be given well defined manageable and irescapable responsibility with full authority to discharge that responsibility.

3. Practical training courses of the farmers and workers should be organized at large scale.

4. Programme should be well defined and specific.

5. "Where there is will there is way" will should be created in workers by giving insentive and a way should be found out so that unwilling workers can be threshed out.

5. Summary:-

In the process of programme planning there are difficulties of different nature such as economic difficulties non-cooperation from the side of the village people, sometime of shortage time. But the most important difficulty is the unwilling worker, who does not want to work. In order to remove this difficulty, two way process should be adopted. Good worker should be given insentive and unwilling worker should be thrashed out.

6. Evaluation:-

What are the main difficulty in programme planning?

How will you remove the difficulties in programme planning?

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Lesson Plan No.36

EVALUATION - ITS IMPORTANCE AND METHODS

Objectives.

i) To explain the trainees how to evaluate programme planning.

ii) To explain the utility of evaluation in extension work.

Previous background.

The concept, objectives and principles of programme planning have been explained in the class.

Aids to be used:

i) Black board and chalk.
ii) Chart and posters.

Presentation of the topic.

Introduction:-

i) What do you mean by programme planning?
ii) What are the various steps envolved in programme planning?

Presentation.

What is evaluation?

Some times evaluation is called as measurement or appraisal or assessment. But evaluation contains more wider meaning than all its equivalents. Measurement is process of collecting data for the purpose of evaluation. Appraisal or assessment represent only one side of the picture.

Evaluation:-

"It is a process by which the values of an enterprise are ascertained." More authentic definition has been given by Kelsey and Herne. They define evaluation as "a process by which the one is able to understand and appreciate the relative merits or deficiencies of persons, groups, programmes, situations, methods and process."

Why evaluation is important?

1. Evaluation helps in setting the objectives.

2) It shows the progress of the programme. Success of the programme gives encouragement to the worker.

3) Determines the right direction. If the things are going in a wrong way, course can be changed in time before much loss is incurred.

4) It indicates the effectiveness of the programme.

5) Weak and strong points in the programme can be traced out. It helps in future programme planning.

6) Evaluation improves the skill in human dealing.

7) It helps in determining priorities.

8) Evaluation is useful for the administrators due to following reasons:-

   i) Administrators can justify the expenditures made in the programme.

   ii) They can furnish facts which may be useful in making decisions.

9) For individual worker it has learning value, they can learn much both from their short comings, their failures and their success. It gives recognition to meritorious workers.

Major objectives and purposes of evaluation:

1) To understand what are the factors which are helping in achieving the objectives and which are retarding the progress.

2) To induce workers to examine their objectives critically.

3) To make the worker to know the purpose of the programme.

4) The workers and planners are able to examine the entire programme in terms of their objectives.

5) To help workers limit the objectives to the extent they can actually accomplish.

6) To bring to light the changes that are not easily observable and which, therefore, require more precise methods of measurements.

7) To facilitate the presentation of results for public support or withdrawal. Evaluation thus serves a useful purpose in public relations.

Evaluation should be done at three levels. It will help to find out the real change.

a) Before the programme starts.

b) When the process of progress is going on.

c) When the final objective is obtained or at the end of the time fixed for the extension of programme.

Measuring Device:-

1. Value scales: Change in social values.

2. Attitude scales - Change in attitudes of the people.

3. Opinion polls.

4. Knowledge and comprehension tests.

5. Interests checks.

6. Skill or performance ratings.

7. Adoption of new practices.

8. Case history techniques.

While choosing the devices of evaluation, we should keep in mind the following creteria:-

1) It should be valid.
2) It should be reliable.
3) It should be objective.
4) It should be practical.
5) It should be simple.

Evidence of changed behaviour:-

1) Improvement in skills.

2) A better understanding of a concept.

3) Increased ability to solve problems.

4) Changed attitude towards things.

5) A shifting of values.

6) A change of interest.

7) Adoption of new practices.

8) Increase in knowledge.

9) High standard of living.

10) Increased emotional integration.

11) Better understanding of the community and its problem.

Summarisation:

Evaluation is very important factor in programme planning. It helps in setting the objective. Gives knowledge about the progress done. It increases the confidence in the programme and gives encouragement to worker. There are a number of devices in evaluation. But we should adopt only those which are reliable, valid, practical and simple.

References:

1. Evaluation in Extension. U.S.A.I.D. Publication.

2. Six keys in evaluating extension programme. U.S.A.I.D.

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Lesson Plan No.31

COMPARATIVE REVIEW OF FIVE YEAR PLANS -
ORIGIN, OBJECTIVE AND FINANCIAL IMPLICATIONS

1. Objectives

To acquaint trainees with the importance of Planning in view of our backward economy and limited resources which need every care and proper utilization for developing the existing resources and their allocation for best result.

2. Aids to be used

i) Black board; (ii) Chart.

3. Presentation

What is planning.

In a vague sense planning implies the existence of a definite scheme and a particular order of doing things which preclude allowing them to drift on.

It stands for any technique of national utilization of the existing physical, mental and material forces or resources of a country for the maximum benefits of its people. It is an organized rational control engineered with the common social objective.

In the words of Planning Commission, 'Planning' is essentially an attempt at working out a rational solution of problems, an attempt to coordinate means and ends, it is different from the traditional hit and mass methods by which reforms and reconstructions are often undertaken.

Planning as a means of country's immediate development was catching imagination of the people since the example of success of Russian Plans. A series of attempts were made well before independence by certain people and organisations to put forth their ideas. The formation of National Planning Committee in 1937 by a resolution of Indian National Congress under the Chairmanship of Sri Jawaharlal Nehru, the Bombay Plan (1944), Gandhian Plan by Sri S.N. Agarwal, People's plan by Sri M.N.Roy and plan by Sri.Visvesvarya are some of the highlights in the history of Indian Planning thought. These attempts though could not be implemented gave currency to the idea of planning as a must for India's any reconstructional programme.

Five Year Plans.

The need for a planned economic development was all the more felt after independence. War and partition had impaired the structure of the country and there was acute shortage of food and raw materials. Under the condition Planning Commission came into existence on 15th March, 1950 and it put forth the draft of Ist Plan in July 1951. The Ist Plan was started on 1st April, 1951 of 5 years

duration and since then we have had three plans completed.

Objectives of the three plans.

First Plan

1. To increase the National income by 11%
2. To increase the production of food grains and raw material for industries.
3. To lay foundation for basic industries (Oil, power and minerals).
4. To increase employment opportunities.
5. To reduce inequalities.

Second Plan

1. To increase National income by 25%.
2. Development of basic & heavy industries for rapid industrialization.
3. Expansion of employment opportunities.
4. Reduction of inequalities, in income, wealth and more even distribution.

Third Plan

1. To secure increase in National income of net 5% per annum (i.e. 34% in 5 years.)
2. Achieve self-sufficiency in foodgrains, and increase Agricultural Production and to meet requirements of industry and export.
3. Expand basic industries like steel, chemical, fuel, power and establish machine building capacity so that further requirement of industrialization can be met locally within 10 years.
4. Utilize fullest manpower resources and ensure substantial expansion in employment opportunities.
5. To establish equality of opportunities and reduce disparity in income & wealth.

Plan outlay (Total provisions.

	Ist Plan	2nd Plan		3rd Plan	
1. Agriculture & C.D.	357-15%	568	11.8	1068	14%
2. Irrigation & power	661-28%	913	19.0	1662	22%
3. Industry & Mining, Cottage & Industry.	179-7.6%	890	18.5%	1784	24%
4. Transport & Communication.	557-23.6%	1385	28.9	1486	20%
5. Social services.	533-22.6%	945	19.7	1300	17%
6. Miscellaneous	69 3%	99	2.1		
7. Inventions	-	-		200	3%
Total:	2356.0 100%	4800	100%	7500	100%
Actual Expend.	1960.0	4600.0		8630.0	
Private Sector. Estimated	1600	2400.		6300.00	
Private Sector. Actual	1800	3100		NK.	

Resources for various Plans
(Estimated)

	Ist Plan	2nd Plan	3rd Plan
1. Balance from current resources.	752 (1+9)	350	550
2. Contribution of Railway.	-	150	100
3. Supplies of other public enterprises.	-	-	450
4. Loans from the public (Net)	205	700	800
5. Small savings(Net)	-	500	600
6. Provident Fund	304	250	265
7. Steel equalisation fuel (Net)	-	-	105
8. Balance of Misc. capital receipt.	178	-	170
9. Additional Taxation	-	450	1710
10. External assistance	188	800	2200
11. Deficit financing	333	1200	550
12. Gap to be filled.	-	400	-
Total:	1960 (Additional)	4800 (Estimated)	7500 (Estimated)

General approach in Ist three Plans
(Objectives & financial outlay).

First Plan

First plan sought to rehabilitate the economy from the ravages of war, famine and partition and formulate policies and build up institutions which would help the economy to develop in the desired direction. In the first Plan more emphasis was laid on the Agricultural sector and as will be clear 43% of the budget was provided for Agriculture C.D. irrigation & power. Further in industrial sector though the allocation was less provision was made for establishing basic industries which may help in developing the pace of industrialization e.g. coal, electricity etc. which are necessary for starting any industry. Importance was given to cottage industries and of 533 crores earmarked for social services, Rs.133 crores were provided for settlement of refugees.

Second Plan

It sought to carry the process of development further; accelerate the rate of growth and bring about structural changes in the economy.

Special emphasis was laid on the maximisation of the rate of capital formation. Though agriculture was given importance, capital enrichment necessarily meant industrialization in view of land man ratio. It was felt that our economy which is predominantly agricultural has put great pressure on land and to have a sound balance economy it was necessary to release pressure on land and expand industrial sector.

Socialistic pattern of society was accepted, greater equality in income and wealth stressed.

Third Plan

1. Idea of self reliance was implicitly stated for the first time as major goal in 3rd Plan.
2. Conceived as a first stage of a decade or more, of intensive development leading to a self reliant and self generating economy.
3. Objectives of a socialistic society and assuring a minimum income for everyone was reemphasised. Stress was laid to provide basic necessaties for every citizen.

4. Summarization

1. Idea of a planned economy vis-a-vis laissez faire economy has caught the imagination of Nations specially those which are developing countries and want to catch up with advanced countries in standard of living & prosperity.

2. Individuals and various organizations had made some attempts before independence to formulate some plans which would lead to improvement in levels of living of our countrymen.

3. The conditions existing in the country immediately after independence necessitated some type of planning for reconstruction of our economy and wipe out poverty, unemployment and disparities in our nation.

4. This resulted in formation of Ist Plan and the success of it lead to 2nd and 3rd plans which lead us to carry the pace of development further and accelerate the growth of our national economy.

5. All the three plans have the same basic objective i.e. to raise the level of living of our countrymen and the different steps in the road of achieving a welfare nation's goal where every citizen is to be provided with a job, a decent living and provide opportunities for his alround development.

5. Testing

1. Why should we have plans at all?
2. What is the main difference in approach between Ist, 2nd & 3rd Plans.

6. References

1. Ist, 2nd and 3rd Plans - Govt. of India, Planning Commission.

2. Towards Planning - V.Vithal Balu M.A.

3. Fundamentals of Planning in India - V.T.Krishnamachary.

4. Indian Plans - K.N.Bhatacharya.

5. Planning in India - Dr.G.P.Khare.

Lesson Plan No:38

OBJECTIVES AND STRATEGY OF THE 4TH FIVE YEAR PLAN OF INDIA

1. Objectives:

To make the trainees conversant with the new plan of the country and thus prepare themselves to embrass the responsibilities that they are required to share in discharge of their duties towards national well-being.

2. A.V.Aids and material to be used:

Chalk, black-board, flannel strips.

3. Previous background:

In the last class we had learnt about the achievements of the 3rd Five Year Plan and today we would discuss about the 4th plan of the country so that we may know about its main objectives.

4. Presentation of the topic:

Fourth five year plan re-affirms the objectives that were laid down in the earlier plans. It includes such policies and programmes which will help in the attainment economic self-reliance with adequate growth rate and speed up the progress towards a socialist society. While drawing up Fourth Plan following principal tasks have been kept in view.

i. Ensure achievement of self-reliance as early as possible. Highest priority will be given to agriculture and such industrial production as will promote exports and replace imports.

ii. Ensure price stability by checking inflationary factors and avoid deficit financing.

iii. Augmentation of supplies of food articles and agricultural raw materials by maximized agricultural production. This will also help in enlarging the income of the rural population.

iv. In industrial development highest priority will be given to the production of fertilisers, insecticides, agricultural implements, including pumps, diesel engines, tractors etc.

v. Production of mass consumption goods such as textiles, sugar, drugs, kerosene, paper etc. will be stepped up.

vi. To ensure continued growth in metals, machinery, / chemicals, mining, power and transport industries. schemes in hand will be completed with maximum possible efforts and only such new schemes will be undertaken as are likely to meet the basic needs

of the country during fifth plan period.

vii. Check the growth of population and ensure better standard of living for the people. All necessary resources will be provided to the family planning programme for implementing on a massive and countrywide scale.

viii. To develop the human resources, substantial additional facilities will be provided in the social services sector specially for the rural areas.

5. Summary:-

Organisation of efforts will be such as to promote rapid progress toward self reliance economy, greater employment and social justice.

6. Checking of understanding:-

i. What is the main objective of the 4th plan?

ii. Which programme has been given highest priority in the plan?

7. Assignment:-

Study these objectives and strategy and ask in the next class about any difficulty to clear doubts etc.

8. Reference:-

Draft outline of Fourth Five Year Plan by Planning Commission.

LESSON PLAN No: 39

PROGRAMME MANAGEMENT IN 4TH FIVE YEAR PLAN IN INDIA

1. Objectives:-

To draw attention to some of the more important tasks of management and administration which should be achieved to obtain the results anticipated in 4th Five Year Plan.

2. Aids to be used:- Chalk, black board, duster, flannel strips.

3. Previous background:-

In previous class we had learnt about the objectives and physical targets set in fourth five year plan but how shall they be possible to achieve is the talk of today.

4. Presentation of the topic:-

Management techniques which apply to projects apply equally to the administration of development programmes. In relation to programmes in the 4th plan it is necessary to concentrate on action to bring about a marked increase in the capacity of technical and administrative agencies to achieve given results within agreed cost, estimates and time schedules. For it following few but very important elements should be kept in mind while implementing the 4th plan in relation to Development programmes:

1. Administrative implications of each programme be carefully analysed and an operational approach developed.

2. In most programmes, more than one agency is involved operationally. In cooperation with the other agencies associated with a programme, the primary agency concerned should define in advance the precise contribution due from each agency and indicate this clearly in the plan of action.

3. While preparing a development programme the administrative and technical agencies concerned should ensure that results such of study, evaluation and research as are available have been taken into consideration and such aspects which require further investigation are indicated.

4. Each development programme should provide for the necessary inservice training and orientation of personnel at various levels.

5. Ensure that materials required are assessed methodically and phased correctly, so that arrangements to meet these requirements are firm and adequate.

6. Administrative and technical organisation for each programme should be so framed that it is capable of achieving the results expected of it. Too often new tasks are assigned without providing adequate personnel and organisation.

7. In implementing programmes at present too much attention is given to the amount of expenditure incurred. Targets should be selected carefully and work in which quantitative measurement is not of great significance should be avoided. Greater emphasis be on quality of performance.

8. Greater personal contact and a team approach between those functioning at different levels are essential for securing improved performance.

9. It is essential that responsible officers should not only be selected with care but should also remain long enough to grow to the full measure of their responsibility. Frequent transfers are harmful to the continuity of operations and morale of organizations.

10. There should be no hesitation in assuring reasonable expectations of promotion to persons who are required to continue on jobs held by them in pursuance of public policy.

5. Summarisation:-

Before the plans are implemented those common problems that are likely to effect the progress of programme be gone through and a solution provided for.

6. Checking of understanding:-

Before a programme is implemented what sort of study is necessary?

7. Assignment:-

Prepare a note on the talk given today and submit in the next class.

8. Reference:-

Fourth Five Year Plan by Planning Commission, Govt. of India Publication.

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Lesson Plan No. 40

INTENSIVE AGRICULTURAL DISTRICT PROGRAMME

1. Objectives

To acquaint the Village Level Workers with the knowledge of the programme, as they are likely to be posted in such districts and the knowledge of the programmes will help them to have clear understanding of this programme and its working.

2. Previous background

In the previous talk, I had discussed about the acute food shortage prevalent in our country and some steps that are being taken to tackle this problem, one of these programmes is Agricultural District Programme which I am going to deal today.

3. Material to be used

i) Chalk and board; (ii) Flannel board and flannel strips; and (iii) Roll up board.

4. Presentation

Introduction.

In January, 1959 an Agricultural production team consisting of 13 specialists sponsored by the Ford Foundation was invited by Government of India to study the countries food production problems and to make recommendations for a coordinated effort to increase agricultural production on an emergency basis. This team along with Indian Counterparts toured the entire country and interviewed all category of personnel from Chief Minister to Gramsevak. The team submitted its report entitled "India's food crisis and steps to meet it" in April 1959. It was on this basis the programme was launched in the year 1961 on pilot basis.

The Intensive Agricultural District Programme is popularly known as the 'Package Programme' first of all it was started in seven districts and subsequently it was extended to nine more districts. Now there is one package district in each state except in Kerala, where there are two districts.

The concept.

Its concept is that instead of spreading the development efforts more or less on a uniform basis through out the country without getting any striking results intensive efforts in agricultural production should be under taken with a combination of all technological improvements and concentration of manpower and resources in selected areas which have optimum condition for stepping up production.

The programme is based on the principle that a few improved practices can no doubt be partially effective if adopted singly, but the full benefit can be attained only if most of the improvements were adopted in combination suitable for specific soil and climatic conditions. The programme involves two things:

a) Adoption by cultivators of a 'Package of improved practices, such as:

i) Improved seeds;
ii) Fertilizers;
iii) Pesticides;
iv) Improved implements; and
v) Proper soil and water management.

b) Provision of package of services:

i) Technical skills;
ii) Availability of credit and production supplies;
iii) Land and water improvement;
iv) Adequate research information; and
v) Storage and marketing and price assurance.

Objectives.

The programme has the four fold objectives:

i) Determining how rapid increases in food production could be achieved so as to provide experience for adoption in other areas.
ii) Increasing the income of the cultivator and his family.
iii) Helping to improve the economic resources of the village.
iv) Providing an adequate agricultural base for more rapid economic development and social betterment.

Criteria of selection of districts.

1. Availability of assured water supply over large area.
2. Existence of well developed institutions like cooperations and panchayats.
3. Minimum of natural hazzardous such as floods drainage, problems and acute soil conservation problems.
4. Maximum potentialities for increasing agricultural production.

Additional staff.

a) Project Officer - one
b) Four subject matter specialists:

1. Agronomist
2. Plant Protection specialists
3. Farm Managements
4. Soils and fertilizers.

c) One Assist nt Registrar

Block level.

a) Additional 10 V.L.Ws.
b) Additional 4 Extension Officers.(Agri.)
c) Additional 1 Extension Officer (Cooperative)
d) Additional 4 - 5 Cooperative Supervisors.

At the district level, the scheme is under the over all control of the District Magistrate while the administrative and technical control rests with the Project Officer, who is of the rank of the Deputy Director of Agriculture.

NORMAL SCHEMATIC BUDGET FOR AN I.A.D.P. DISTRICT.

Item	Budget for five years: Non. Rec.	Recu-rring.	Total.	Average per year	Rs. in lacs: Amount of quental assistence.	State Govt's. share.
Additional staff	-	52.00	52.00	10.40	7.80	2.60
Training	-	2.00	2.00	0.40	0.40	-
Transport	8.50	11.50	20.00	4.00	4.00	-
Scientific demonstrations.	-	5.00	5.00	1.00	1.00	-
Information Unit	1.00	2.50	3.50	0.70	0.70	-
Soil testing laboratory	1.00	1.50	2.50	0.50	0.50	-
Implements workshop	1.50	3.50	5.00	1.00	1.00	-
Quality seed programme	0.30	1.00	1.30	0.26	0.26	-
Water use and management	0.60	1.40	2.00	0.40	0.40	-
Banch mark survey and assessment	-	2.00	2.00	0.40	0.40	-
Total:	12.90	82.40	95.30	1 .06	16.46	2.60

The facilities provided are:

1. Adequate and timely supply of production requisites such as fertilizers, improved seeds, pesticides and implements.

2. Adequate and timely supply of credit through cooperative societies.

3. Arrangement for marketing and other services to enable the farmer to obtain a reasonable price for their marketable surplus.

4. Adequate storage facilities for stocking production supplies and farm produce.

5. Intensive educational efforts, particularly through scientific demonstrations and on the job training courses through trained Extension workers.

6. Strengthening of transport arrangement to ensure mobility of supplies and staff.

7. Village planning for increased production including live stock improvement programme.

8. Strengthening of village organisations like the cooperative and panchayats.

9. Establishment of Agricultural Implements workshop and seed and soil testing laboratories.

Implementation.

I. Package of practices.

I.A.D.P. has been conceived essentially as an impact programme. The package of Improved practices involved for each crop is intended to speed up production process by presenting a suitable combination of known improvements based on results of research which could immediately be applied to individual fields. As stated above, the package includes the use of improved seed, fertilizer and manures, pesticides, improved implements and proper soil and water management.

This is an important development in Indian Agriculture in the sense that for the first time the available findings of Agricultural research have been selected and summarised for application in the field of Extension.

The Director of Agriculture has been asked to review the package of practices for the crop annually so that the gap in knowledge are brought to the notice of research workers and package of recommendations is improved upon from time to time.

II. Farm Planning.

The programme is largely farmer centred and every service intended to help the farmer is coordinated in such a manner as to direct the working of several agencies, official and non-official, towards the common aim of stepping up production.

The Extension agency helps to prepare a farm production plan for every participating farmer. In doing this, the Gramsevak makes the concrete recommendations regarding the varieties, which the farmer has to grow, the quality of Farm Yard Manure and compost, he has to use the pesticides he would need for plant protection and the improved agricultural implements that he should have on this basis the Gramsevak prepares an inventary of farmers requirements of agricultural supplies and works out his credit needs which the cooperative have to provide.

Thus the preparation of Farm Plans result in the following:

a) personal contact between Extension worker and farmers.
b) Farm plan imparts knowledge on improved agricultural practices and skill concerning the adaption.
c) It makes a substantial number of farmers aware of potentialities of improved practices in raising production.

III. Improved seeds.

With a view to strengthening the seed programme in the package district a specific programme for production and distribution of quality seeds is being implemented in these areas. The distribution of improved seed in these districts both in terms of quality and the area covered has shown a steady improvement year after year. During 1964-65 16,300 tonnes of improved seeds of major food crops was distributed as compared to 92,000 tonnes in 1961-62.

IV. Fertilizer.

The requirements of nitrogenous fertilizers in the package districts is met in full every year. The fertilizer consumption in India is amongst the lowest in the world. The countries which have achieved a significant break through in agricultural production have also reached very high level in fertilizer in the agricultural production programme of the country.

V. Godowns.

A centrally sponsored crash programme for construction of storage godowns, both at rail head/mandi level was taken up in the year 1964-65 in the Intensive Agricultural Districts including the I.A.D.P. districts. The scheme envisaged construction of 464 godowns at rail head/mandi level and 1036 godowns at the village level at a total cost of Rs.2.83 crores during 1964-65, 1965-66. The scheme could not make satisfactory progress in 1964-65. The work was however, pushed forward during the subsequent years and large number of godowns were constructed. The state Governments were asked to complete the work by 1966-67. As a result of the efforts put in under the crash programme as well as under normal storage godowns construction programme in the cooperative sector 2537 godowns had been completed by March 1967, in the I.A.D.P. district and 364 godowns were under construction as against an estimated requirement of 4777 godowns to provide adequate storage facilities.

VI. Plant Protection.

Plant protection measures have been taken on an intensified scale in all the package districts. The following steps have been taken in these areas:

a) Stocking of plant protection equipment and material in adequate quantities in depots, for timely use.
b) Prophylactic treatment of seeds and crops on an area wide basic toward off attacks of pests and diseases.
c) Controlling rats, weed and storage grain pests trouble on district wide basis.
d) Checking the spread of pests by treating the nurseries and promptly eliminating newly introduced pests.

VII. Improved Agricultural Implements.

a) An implements workshop has been provided for in each package district and efforts are being made to give a fillip to the production, popularisation and demonstration of improved agricultural implements suited to regions.
b) Farmers and village artisans are also trained in these workshops in use of implements and their proper maintenance.
c) Newly designed implements are tested in these workshops.

VIII. Soil testing.

a) In each package district, a soil testing laboratory has been set up to meet the needs of the district.
b) Soil sample collected from the cultivators fields are tested in these laboratories and recommendations made regarding the application of fertilizers in proper doses.
c) The results of soil analysis are utilized to refine the "package of practices" recommended for adoption by farmers.
d) Soil fertility maps are prepared here.

IX. Credit and marketing.

a) The credit in these districts is production based and production oriented. The procedure for giving loan has been simplified to meet the requirements of the programme.
b) Cooperatives are being strengthened to meet the needs of the farmers.
c) Cooperative marketing is also being organised to assure producers a fair return for their produce and for facility of timely recovery of loan.
d) Credit: Cooperative credit in the I.A.D.P. districts showed an increase during the period 1961-62 and 1966-67. During these six years the loan advanced by the primary credit socieites increased from Rs.15.27 crores in 1961-62 to Rs.24.04 crores in 1966-67 accounting for an increase of 57%. The heavy over dues which have piled up over a period of time largely as a result of crop failures have come in the way of expansion in the volume of credit

in many districts. At the primary level, the other dues were as high as 92% in Cachar, 90% in Pali, 54% in Thanjevour and between 44 and 49% in Bhandara, Raipur and Sambhalpur at the end of June 1965. A concentrated drive is therefore necessary for scaling down the overdues as an essential pre-requisit for ensuring a smooth flow of credit on the desired scale. The inadequacy of cooperative credit vis a vis growing needs of the programme has lead to serious thoughts on alternative or supplementary sources of production financing. It is proposed to set up Agricultural credit corporations in Assam, Bihar, West Bengal and Rajasthan where the cooperative structure is relatively weak. The Corporations are intended to to supplement the cooperative movement in that states as a transational measure. There is also proposal to establish Agricultural Development Corporation as a measure to suppliment the efforts of the existing agencies including the Government and cooperatives in raising the level of Agricultural production.

X. Field demonstration.

In order to educate farmers and popularise the practices the composite type of demonstrations are laid down on the farmers field. In 1964-65 21,000 demonstrations were laid out. Economics was also worked out and it was proved that one rupee spent by farmer on the adoption of the package of practices, he got in return an additional of Rs.2/- to Rs.3/-.

Results.

The adoption of improved farm practices has resulted in a steady improvement in Agricultural productivity in the Agricultural districts.

As fertilizer use is stepped up from year to year substantial increase in production are taking place.

5. <u>Summarisation</u>

I have discussed the I.A.D.P. emphasising the following points:

1. Need and concept of I.A.D.P. in India.
2. The objectives.
3. The basis for selection of districts.
4. The staff required to man the programme at district, block and village level.
5. The facilities provided in I.A.D.P. districts.
6. The implementation of the programme with respect to the following:

    a) Package of practices.
    b) Farm Planning.
    c) Improved seeds.
    d) Fertilizers.

e) Plant protection.
f) Improved Agricultural implements.
g) Soil testing.
h) Credit and marketing facilities.
i) Field demonstration and utilization of results.

6. Testing and check up

1. What is the concept of I.A.A.P?
2. In which year the programme was started?
3. What do you know about farm plan? How is is prepared?

7. References.

1. Intensive Agricultural District Programme Report by Experts Committee on assessment and Evaluation. Ministry of Food, Agri.C.D. and Cooperation. (Deptt. of Agr.)(1961-63) (196065, 1965-66 & 1966-67).

2. I.A.D.P. by Sri J.V.A. Nehemiah.

3. Intensive Agricultural Programme by Sri.M.S.Randhawa.

8. Assignments

In the next class I would like to discuss the I.A.D.P.

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Lesson Plan No. 41

INTENSIVE AGRICULTURE AREA PROGRAMME

1. Objectives

To equip the trainees with the concept of the programme as they are likely to be posted in the areas where the programme is being or might be implemented. Hence the knowledge of the programme is necessary and useful.

2. Previous background

In my previous talk I had discussed about the Intensive Agricultural District Programme. Today, I propose to discuss the Intensive Agricultural Area Programme.

3. Aids to be used

1. Chalk and board.
2. Flannelstrips and board.

4. Presentation

Introduction.

In the mid term Appraisal of the Third Five Year Plan it was stressed that much greater emphasis should be given to the development of scientific and progressive agriculture in an intensive manner in areas where a high agricultural production potential exists. Accordingly, in January 1964, the agricultural production board agreed that about 20 to 25 percent of the cultivated area of the country should be selected for intensive agricultural development.

The experiences gained in the working of the package programme which has been in operation in selected districts for the last four to five years, have been drawn upon in the formulation of the Intensive Agriculture Areas Programme with emphasis on oncreasing production of some major food crops like paddy, wheat, millets and pulses.

Approach

This programme also follows the 'package' approach the use in agriculture of inter related factors - physical, social and instructional - in strategic combinations which are likely to produce an impact on agricultural production.

It is again based on the fact that our planning in agriculture before the package programme concept was adopted, was defective and less productive because of the dispersal of our resources on too many schemes over too wide an area.

Selection of the area

1. The selection of the District and block was done on the basis of predominant crop and special attention would be given on it.

2. The entire crop economy was kept in view for development while planning agricultural programme.

Coverage.

The State Governments were asked to draw up a phased programme of coverage during the three years period beginning from 1964-65. The programme chalked out by them and initiated to the Govt. of India is as follows.

Year	No. of Districts selected	No. of blocks taken up in the selected districts.
1964-65	114	1,084
1965-66	114	1,285
1966-67	114	1,410.

Staff

District level.

1. One Project Officer of the status of Deputy Director of Agriculture.
2. Two subject matter specialists (i) Agronomy (ii) Plant Protection.
3. Agricultural Information Officer.
4. Deputy Assistant Registrar of Cooperative Societies.

Block level.

1. Five additional VLWs in the beginning and ultimately ten when trained staff is available.
2. One Additional Agricultural Officer.
3. One Additional Extension Officer Cooperation.

Administrative arrangements.

To ensure a successful implementation of the Intensive Programme, steps have been taken to strengthen and streamline the administrative machinery at different level, in each state. These include:

a) An effective coordination between the various agencies (official and non-official) concerned with agricultural production at different levels through coordination committee.

b) Delegation of adequate powers - financial and administrative to key officials e.g. Collector and Project Officer to ensure speedy action.

c) Keeping the transfer of the field staff in the minimum to secure continuity in planning and implementation of the programme.

d) Rationalisation of recruitment rules to avoid delays in filling up vacancies.

e) Creating single line of command and administration of the Agricultural Programme by vesting the control of the Block Extension staff i.e. V.L.W. and A.E.O. in the Project Officer and District Agriculture Officer.

Implementation.

Fertilizers.

Concentrated efforts are being made to promote the consumption of fertilizers in the Intensive Agricultural Areas. The total fertilizer requirements of these areas have been assessed and additional allotments are being made by the Government of India.

In India per hectare consumption of Nitrogen is almost lowest in the world. If we want to reach high level of per hectare production we must step up the use of fertilizer. This means the production programme of fertilizers must be accelerated.

The use of fertilizer is one single factor capable of making a substantial contribution to increase in production in the intensive areas. In view of the general shortage of fertilizers in the country emphasis has been laid on fertilizers being used in areas which have shown a more economic response to their application. Proper timing of application and placement of fertilizers on an individual farm is also being streamlined to ensure that the distribution agencies, Government or private are fully geared to the task.

Local manurial resources.

In view of the existing shortages of supply of fertilizers emphasis is being laid on intensifying the programme of compost making, green manuring and utilization of urban waste in the intensive areas.

The multiplication of green manure seeds by undertaking bulk plantation of waste lands, in forest areas and on Govt. seed farms, provision of adequate and timely irrigation facilities and raising of green manure plants om bunds etc. in paddy areas have been suggested to State Govts. for implementation.

Storage.

One of the main factors responsible for the present low rate of off take of fertilizers is the non-availability of stock during the manuring season at many places, especially in areas in the interior. A high priority is therefore, being given to the construction of storage godown at various levels. Funds have been made available for this purpose to State Govts. during 1964-65

1965-66 under the special development programme, over and above the State Plan ceilings. The States have been asked to give preference to the construction of large sized godowns at rail head/mandi level and where stocks are received first. In construction of rural godown preference is given to areas which are inadequately served at present. Under special Development Programme an amount of Rs.2.99 crores have been sanctioned by the Govt. of India to State Govts. for construction of 665 rail head/mandi level godowns and 2050 village godowns. The programme for saturation of the Intensive Areas with storage facilities in all states is likely to entail an expenditure of about Rs.11 crores.

Plant Protection

With a higher intensity of cropping and greater use of fertilizers, the incidence of pests and diseases is likely to increase. Plant protection activities have, therefore to be stepped up considerably. The most pressing need in this connection is provision of an adequate number of power sprayers and dusters, pesticides and insecticides for undertaking area wide operations.

Extension Education-cum-Information

An important task in a developmental programme of this type is to create awareness among the farmers of the benefits that accrue due to the adoption of improved agricultural practices. This is done by building up a sound agricultural information and Extension Education programme. Useful information is disseminated through media of information and publicity.

Method and Result demonstrations are one of the most effective media for popularising the thinking and action of a substantial number of farmers. Emphasis has therefore been laid on the laying out of a large number of demonstrations and the utilization of other media of information - such as use of leaflets, posters, charts, radio, films and newspapers.

Budget provision.

(Rs. in lacs)

Item	Budget for 5 years Non-Rec.	Rec.	Total.	Average per year.	Amount of central assistance.	State Govts. share.
1. Additional staff.	-	16.00	16.00	3.20	1.60	1.60
2. Training	-	2.00	2.00	0.40	0.10	0.30
3. Transport	35.00	0.50	35.50	7.10	5.30	1.80
4. Scientific demonstrations.	-	4.00	0.80	0.40	0.40	0.40
5. Agri.Information.	-	1.00	1.00	0.20	0.10	0.10.
Total	35.00	23.50	58.50	11.70	7.50	4.20

Result.

The impact of Intensive Agricultural area on production has already been felt in some states. If these Intensive areas are fed with requisite quantities of inputs particularly quality seeds, fertilizers and plant protection equipment and materials, they are bound to make an outstanding contribution to the production of food in the country.

5. <u>Summarisation</u>

1. Need of I.A.A. Programme:

   a) Greater production where greater potential exists.
   b) Extension of Intensive scientific agriculture through package of practices.

2. Selection of the area.

   a) Strategic crops were selected.
   b) Potentially strong districts were listed out.

3. Phasing of the programme.

   a) At district level (staff).
   b) At block level(staff)

4. Administrative arrangements

   a) Strengthening and streamlining the administrative machinery.
   b) Coordination at various levels delegation powers, rationalisation.
   c) Arranging for single line of command.

5. Implementation and streamlining.

   a) Arranging for supply line according to the need of the area.
   b) Utilization of local resources.
   c) Plant protection and measures.
   d) Storage and marketing facilities.
   d) Creating sources of latest information and facilities of communication process.

6. Financial implications.

6. <u>Testing and check up</u>

1. What are the objectives of I.A.A.Programme?
2. In what way it is beneficial for increasing the Agricultural Production?
3. What is the staffing pattern at block level?
4. What important precautions you will take while implementing the programme.

7. References

1. Review of Progress of Intensive Agricultural Area Programme by Ministry of Food & Agriculture, Govt. of India.

2. Progress and problems of Intensive Agricultural Area by Dr.M.S.Randhawa.

3. Intensive Agricultural Programmes by Dr.M.S.Randhawa.

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Lesson Plan No. 48

HIGH YIELDING VARIETIES PROGRAMME

Objectives:

i) To enable the trainees to understand the programme.

ii) To enable them to be able to help and guide the farmers in increasing agriculture production rapidly.

Aids to be used:

Black board.
Simple charts and one bar chart.

Presentation of the topic:

The new strategy of increasing agriculture production in India was published in 1965, but was implemented from April 1966-67. There are 8 major elements in it and high yielding varieties programme is the first and the most important of all of them.

What is H.V.P.

The H.V.P. envisages introduction of the newly identified and evolved high yielding strains of paddy, wheat hybrids of maize, jowar and bajra which are responsive to high doses of fertilization.

Aim:- Its aim is to increase agricultural production and thereby firstly to solve the food problem of the country and secondly to raise income of the cultivators by increasing per acre yield.

Area:- The programme is concentrated mainly in areas with irrigation or assured rainfall which which are responsive to such intensive production efforts. It is not limited to any specific district or crop as in I.A.D.P. and I.A.A.P.

Varieties covered under H.V.P.:-

A number of High Yielding Varieties of paddy and wheat exotic and local and hybrids of maize, jowar and bajra are covered under H.V.P.

Sr. No.	Crop	Varieties	Yield in lbs.per acre.	Yield of desi- varieties in lbs. per acre.
1.	2	3.	4	5

1. Paddy	T.N.1 Tainan-3 Tiachung-65 I.R.-8 C.O.25 N.C.678 China-1039	2000 - 5000	600 - 1500
2. Wheat	Sonora-64 Sharbati Sonora Kalyan sona Sonalika S-331 S-307 K-68	2000 - 4000	600 - 1200
3. Maize	Ganga -101 Ganga-1 Ganga Safed-2 Ganga-3 Deccan Ranjit Composite 6	1000 - 3500	900 - 1200
4. Jowar	C.S.H. 1 C.S.H. 2	1800 - 3500	900 - 1200
5. Bajra	H.B. 1 H.B. 2	1000 - 3000	400 - 900

Locally evolved varieties of paddy ADT.27, CO-29, K-68 for wheat have also good yield. Supply of inputs like seeds, fertilizers, pesticides and credit is made. Simple farm plans are prepared and requirements of inputs are based on them.

Targets and achievements in H.V. programme :-

Year	1966-67		67-68		68-69	1970-71
Crop(unit)	Target	Achievment.	Target	Achievement	Target	Target
Kharif (Area in Mili.Acres)	-	1.82	7.85	5.00	16.00	24.5
Rabi (Area in M.Acres)	-	2.84	10.16	7.27	5.00	8.00
Total (Area in M.Acres).	-	4.66	18.01	12.27	21.00	32.5

During 1967-68 (Rabi) previous target was 7.15 M. acre but in order to meet the deficit in kharif, targets were revised and fixed as 10.16 M.acres, thus total being 18.01 M.acre instead of 15 M.acres. Achievement during kharif had been 5 M.acres and 7.27 M.acres of wheat during rabi. Figures regarding other crops i.e. paddy etc. during rabi have not been available so far. Area in 1970-71 under different crops has been fixed as 12.5 M.acres for each of H.maize, H.jowar and H.bajra. The total additional yield by the end of 1970-71 is expected to be 25.5 million tons.

Performance during 1966 to 1968 :-

It has been quite encouraging during these 3 years. Average yields during kharif 1967-68 have been the following:-

Paddy	1668 - 6452	lbs. per acre.
H.Maize	964 - 3616	-do-
H.Jowar	1843 - 4026	-do-
H.Bajra	891 - 3520	-do-

Cropwise highest yield obtained in one or the other states of India is given in the following chart.-

Crop	1966-67 Kharif	1966-67 Rabi	1967-68 Kharif
Paddy	9955	13000	11000
H.Maize	4101	7700	8800
H.Jowar	6614	10120	8800
H.Bajra	6331	6160	6185
Wheat	-	10340	-

Incidence of pests and diseases:-

Some pests and diseases attacked in paddy due to non-adoption or partial adoption of recommended package of practices. Control measures were adopted. During October, 1967 incidence of ergot in hybrid and local bajra occured in large area of a number of states. This was due to excessive rain in August and September causing humidity and then warm climate. During Rabi 1967-68 black tip disease on wheat was reported from several states of North India. This had no bad effect on the programme as it was not harmful for Health.

Steps taken to ensure success of the programme :-

The success of H.V.P. depends entirely on the timely availability of various agriculture inputs like seeds, fertilizers, pesticides, credit etc. to the participating farmers. Let us examine the arrangements made for their supply.

i) Seeds :-

The seed production programme has been decentralized from 1966-67 and each state is making its own arrangements to multiply seeds according to targets. The National seed Corporation produces seed for Union Terrotories and helps other states, if necessary. It supplies foundation seed of hybrids to different states.

ii) Fertilizers :-

The Central Government allocated approximately 2.3 lakh tons of nitrogen during kharif 1967 and 4 lakh tons of nitrogen during Rabi 1967 to different states. Afterwards it was decided that full requirements of H.V.P and I.A.D.P. will be met from the central pools and the requirements of other programmes will also be partially met.

iii) Pesticides :-

All the states have got adequate stocks of pesticides of different kinds and they are being stocked within easy reach of the farmers who are advised to spray the crops at regular intervals as a prophylactic measure toward off attacks of pests and diseases. Mobile plants protection squads are also working and covering 500 to 1000 acres per day. Aerial spray have also been carried out on bigger areas i.e. 2 lakh acres during 1967-68 in the states of Assam, Gujrat, Maharashtra and Madras.

iv) Credit :-

The farmers, who are members of Cooperative Societies get short term loans through them. Medium and long term loans are given through Land Development Banks and Agro Industrial Corporation. The state Govts. sanction taquavi loans to the cultivators who are not members of Cooperative Societies.

v) Staff :

For effective implementation of H.V.P. the state governments have been asked to strengthen the field extension agency both at the district and block levels. Additional staff at the rate of 20 V.L.Ws, 4 A.E.Os and 2 C.E.Os in each block and subject matter specialists at the district level are posted.

vi) Training :

The training of staff is conducted at different levels by the State Governments and the Central Govt. assests in this short duration/courses of 2-3 days are also held for farmers at village level before each crop season.

Summarisation :

The class has been taught :-

a) What H.V.programme is ?
b) Aims of the programme.
c) Varieties covered under H.V.P.
d) Targets and achievements.
e) Steps taken to make the programme successful.

Testing and check up :

i) What do you understand by H.V.P.?
ii) What steps have been taken in India for the success of the programme?
iii) Name the High Yielding Varieties of Wheat.

References:

i) Five years of research on dwarf wheats published by I.A.R.I. New Delhi.

ii) Third integrated course for Agricultural Extension Officers(1968)

iii) Pamphlets on High Yielding Varieties, recently published by I.A.R.I. New Delhi.

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Lesson Plan No. 43

RULES AND PROCEDURES RELATING TO DEVELOPMENT AND TAQUAVI LOANS.

1. Objectives:

i) To enable the trainees to understand the topic.

ii) To improve their knowledge for guiding and assisting the farmers in getting loans and subsidy.

2. Previous background :

The trainees have learnt the rules and procedure relating to grant in aid.

3. Aids to be used :

Black board and chart.

4. Presentation of the topic :

A- Introduction :- Discussion on the following:-

i) What is the difference between the grant in aid and subsidy?

ii) What is the difference between grant in aid and loan?

Procedure for advancing loan :-

1. Taquavi application on usual prescribed form is obtained from the cultivator under section 30 Ch.VII. Stamp one anna upto Rs.50/- and 0.50 passa above Rs.50/- is affixed on the application.

2. The recommendations are given by the V.L.W. for the genuineness of the loan applied by the cultivator in 5 points:-

i) Genuineness.
ii) Utilization for specific purpose.
iii) Easy recovery possible.
iv) Adequate security furnished.
v) Land which will be benefitted.

3. The enquiry reports are to be furnished by the officers not less than the rank of Naib Tehsildar. The securities offered followed by extract of Khasra No. of the applicant properties or his Zamindar's should have Rs.1/- court fee stamp on each extract.

4. The application is then sent to Tehsil for verification of status and dues against the applicant and zamindar.

5. After the completion of above formalities the properties given in securities are hypothicated in court (Affidavit).

a) Notary stamp. Rs.3.00
b) Affidavit. Rs.4.50
c) Revenue stamp. Rs.0.50

6. The certificate of bar or no encumbrances is obtained from the Registrar Office.

7. The application is sanctioned under rule 52 of U.P. Taquavi rule 1942.

B.D.O.	2500/-
D.P.O.	5000/-
D.M.	10000/-

8. Rupees four is got to be deposited in Treasury through Treasury challan for the registration of the properties offered in securities. The loan bill is prepared, the cultivator is given loan before two securities and bond is executed. Interest 8¼% per annum.

Rules for granting loans:-

U.P. Taquavi rules 1942 rule 44-joint loan may be advanced to group of farmers not less than 6 on joint responsibilities Bhumidhari 150/200 times the annual valuation of his properties are determined, at hereditary rates applicable. 120 times in case of Sirdari. For adhivasi and hereditory cultivator, twice, for Assami equal and for Dakhilkar 5 times of the land rent payable.

Sr. No.	Item	Amount of loan that can be sanctioned.	Duration of completion of work.	Instalment of recovery.	Rate of interest.	Loaning agency.	Subsidy if any.
1.	Masonry well.	1000 to 2000	1 year.	10 yearly or 20 half yearly.	8¼ %	L.D.B. or Agro Industrial Corporation.	25% if the work is completed in time.
2.	Rahat	650	½ year	-do-	-do-	-do-	-do-
3.	Boring	500 to 1250	1 year	-do-	-do-	-do-	-do-
4.	Pumping set	2000 to 6500	½ year	-do-	-do-	-do-	25% subsidy for 5 H.P. engine if the holding of the applicant is less than 5 acres.
5.	Private Tubewell.	5000 to 10000	1 year	-do-	-do-	-do-	-do-
6.	Repair of masonry well.	400	½ year	-do-	-do-	-do-	D.I.O.
7.	Private bundhis.	5000 or 150 acre.	1 year	-do-	-do-	L.D.B. or Agriculture Industrial Corporation.	25% if the work is completed in a year.
8.	Canal	15000/-mile	-	-do-	-do-	-do-	

Points to be considered while sanctioning loan :

1. Application on the prescribed form.
2. Recommendation of V.L.W.
3. Acceptable properties (including seerdari) offered in securities. The loan does not exceed 2/3 of the valuation of properties.
4. Non encumberance.
5. Rupees four for registration.
6. Affidavit is complete or not.
7. Bond rule 49 form T_2 whether excented or not.

Points to be considered while sanctioning loan for pumping set or private tube well:-

i) The applicant owns land 5 acres.
   3 H.P. Set or tubewell.

ii) The applicant owns land 5 to 25 acres.
   5 H.P. pumping set or tubewell.

iii) The applicant owns land 25 to 75 acres.
   7 to 8 H.P. or tubewell.

iv) The applicants own land above 75 acres.
   10 H.P. tubewell.

The private tubewells should not be installed within the radius of 4 furlongs from the State tubewell or 6 furlongs distance from the canal having top width 8' or 2 furlongs from the minor having width less than 8'.

Amount admissible for loan :-

A - i)	Electric P. Set.	5 H.P.	2500.00
ii)	Diesel P. Set.	"	4000.00
iii)	Electric P. Set.	5 to 8 H.P.	3500.00
iv)	Diesel P. Set.	-do-	5000.00
v)	Electric P. Set.	above 8 H.P.	4500.00
vi)	Diesel P. Set.	-do-	6500.00

B - Tubewell boring :-

i)	Upto 60'	4000 max.boring 3"
	above 60'	Rs.7/- per foot of boring.
ii)	Upto 80'	5000/- max boring 4"
	above 80'	Rs.10/- per foot of boring.
iii)	Upto 100'	6000/- max boring 5"
	above 100'	Rs.14/- per foot of boring.

iv) Upto 120' Rs.8000/- max boring 6"
above 120' Rs.17/- per foot of boring.

v) Upto 150' Rs.10000/-
above 150' Rs.25/- per foot of boring.

Rate of subsidy for diesel pumping set :-

25% subsidy for 5 H.P. engine if holding of the applicat is less than 5 acres.

Summarisation :

a) Procedure for advancing loan.
b) Rules regarding sanctioning of loan.
c) Points to be considered while sanctioning loan.

Testing and check Up.

i) What is the general procedure to be followed for advancing loan to a cultivator?

ii) What are the points to be considered while sanctioning loan applicantions?

iii) What amount can be loaned for installation of a private tubewell and what are the conditions relating to it?

References:

U.P.Taquavi loan rules.

Lesson Plan No. 44.

OBJECTIVES OF APPLIED NUTRITION PROGRAMME

1. Aim

To emphasise upon the need of Applied Nutrition Programme in India and to acquaint the participants about the objectives of this programme clearly.

2. Previous background

Participants are experienced workers and have heard about the Applied Nutrition Programme.

3. Aids to be used

Black board, flannel graph, flannel board, charts and flash cards.

4. Presentation

Introduction.

After wishing the class, the teacher will ask what does the A.N.P mean, Then the teacher will share his views with the participants about this programme of national importance.

The teacher will give information about the following:

1. What is A.N.P?
2. How was this programme started in India?

The Programme of Applied nutrition assisted by the UNICEF, F.A.O. and W.H.O. represents the first systematic attempt on a significant scale to develop a coordinated and comprehensive programme of nutrition education and training in the production, preservation and consumption of nutritionally valuable foods. Applied Nutrition Programme is a national programme to improve the general health of the people through adequate diet.

History.

In 1957, in the state of Orissa experiments were made for the distribution of skimmed milk, later on supplemented by other nutritional food. (But obviously this programme cannot be prepetuated unless it is supported by the programme of local production of supplementary food and regular consumption thereof. The crux of the matter is to promote intensive education of rural community for production and, consumption of these supplementary foods). The experience of Expanded Nutrition Programme in Orissa showed that the training and education of villagers alone was not enough. New orientation and emphasis need to be given to all such personnel whose activity has a bearing on this multifaceted programme and who deal with rural communities e.g. Agricultural Extension Workers, Home Economics, auxilliary health workers and teachers. This had led to strengthening the teaching of Applied Nutrition Programme in various institutions.

In U.P. the programme was initiated in two districts of Basti and Gorakhpur in February 1962. Next year it was extended to other districts and in many states. A number of international and national organisations are involved in this Programm viz. UNICEF (United Nations Children Fund) provides the funds and W.H.O. (World Health Organization) and F.A.O. (Food and Agriculture Organisation) contribute technical assistance.

Need.

What was the need of Applied Nutrition Programme in India?

This programme was necessitated due to the following reasons:

a) Vast population growth (2.4% increase per annum)
b) High birth rate (40-1000)
c) Low agricultural production (Deficit of 30 million tons per annum).
d) General Ignorance of the people about adequate diet.
e) Faulty food habits.
f) Low intake of protective and body building food, as shown in table given below

Comparative diet table

Food stuff	Daily intake in oz.	Recommended in oz.
Cereals	16.6	14.0
Pulses.	2.3	3.0
Leafy vegetables	0.9	4.0
Other vegetables	4.1	6.0
Ghee/oil	0.9	2.0
Milk and its products.	3.3	10.0
Meat, fish, egg.	0.9	4.0
Fruits and nuts.	0.6	3.0
Sugar and jaggary	0.7	2.0
Condiments.	0.4	-

In one of the reports published by F.A.O. it is mentioned that 20% of the people in under developed countries suffer from under-nutrition and another 60% suffer from mal-nutrition. Though detailed surveys about nutrition status have not been carried out in India but definitely a much larger percentage of people are victims of both. The average man in the country is not fully productive member of society. He is lacking in energy, alertness and endurance.

Terms defined.

Under nutrition is the condition which results when insufficient food of any kind is eaten. In extreme cases, it is called starvation. It is associated with poverty.

Mal-nutrition is the state where insufficient food is eaten to prevent hunger, but the food stuffs which are eaten do not supply the balanced amount required for normal growth and maintenance of health.

Protective foods are those foods which protect us against nutritional or deficiency diseases, give strength and maintain body.

The effect of inefficient or deficient food on children is particularly devastating. According to one publication (Window on UNICEF) out of five children born three live and out of these three one suffers from nutritional disease viz. Beriberi, Rickets, scurvey, Anaemia and night blindness.

Considering the large deficiencies in respect of food, recognising the need for incorporating the nutritional objectives in agricultural policies and being convinced of the importance of Nutrition education. suited to socio economic conditions of the rural area, the Government laid down the following objectives of A.N.P:

Objectives of A.N.P.

They may be divided under two heads:

i) General and
ii) Specific

i) General objectives.

To develop a national programme of education and training in applied nutrition and allied subjects:

2. To provide facilities for training.
3. To organise survey of general nutrition problems.
4. To assist in the extension of applied nutrition programme.
5. To promote through demonstration and education improved practices in the production, storage, preservation and use of protective food (Vitamins, Minerals and proteins)

ii) Specific objectives.

1. To assist all the GTCs, Home Science Wings, Agricultural and Veterinary colleges in strengthening their facilities regarding staff, equipments, and transport for conducting practical courses in Poultry keeping, dairy, fisheries, horticulture and home science in relation to human nutrition.
2. To organise reorientation and refresher courses for teaching, technical and extension personnel at different levels.
3. To ensure that the officials of the State Governments concerned with the production and use of food are well acquainted with the objectives of A.N.P.
4. To provide assistance in the production of appropriate literature and teaching aids.
5. To strengthen the supply line in respect of seed, stock and equipment required for the extension of A.N.P.
6. To ensure effective utilization of protective food by members of vulnerable groups viz. pregnant and nursing mothers, preschool and primary school children.

In terms of programmes or area the objectives of the applied nutrition programme may be given as belows:

1. To ensure effective utilization of protective food by vulnerable groups.
2. To organise suitable programme of training and orientation in nutrition education at different levels.

3. To increase the production of protective food.

Food has been taken as a sole biological necessity by the medical man and they divide food under three heads:

i) Body building food.
ii) Energy and heat giving food.
iii) Protective food.

But the Holy Gita in Chapter VII classified food as:

i) Satvik,
ii) Rajsik, and
iii) Tamsik.

that is, it takes into account the association of food with the sentiments and values of life. This emphasises that food habit is an inseperable part of the total pattern of our cultural living.

Application.

Please make a survey of one dozen families to see what do they eat and do the members keep normal health. (EAT TO LIVE AND NOT LIVE TO EAT).

5. Check up

1. Differentiate between under-nutrition and mal-nutrition?
2. Mention specific objectives of A.N.P.

6. References.

1. Plan of operations for Applied Nutrition Programme in Uttar Pradesh - Chapter 1. Pages 1 - 5.
2. The Quest S.No.1, Vol.VI. Pages 76 to 94.
3. Applied Nutrition Programme in India. UNICEF, Ch.II Pages 1 - 4.

7. Assignments

Please read the Plan of Operation for Applied Nutrition Programme in your respective state and examine its objectives.

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Lesson Plan No. 45

VARIOUS ASPECTS OF THE APPLIED NUTRITION PROGRAMME

1. Objectives.

   1. To acquaint the pupils with the various aspects o applied nutrition programme.

   2. To enable them to understand their role in the Extension of this programme of national importance.

2. Previous background

Trainees have been told about the objectives of applied nutrition programme.

7. Aids to be used

(a) Black board; (b) Chalk; (c) Duster; (d) Flannelgraphs/Flip book; and (e) Chart.

4. Presentation

Introduction.

Q.No.1 When was the Applied Nutrition Programme started in U.P?
" 2 Narrate the objectives of Applied Nutrition Programme?

New subject matter:

I Unit	Method
There are three aspects of Applied Nutrition Programme. a) Training b) Production c) Consumption	Flip book/ Flannel graph. Question on the assumption that some would have received the training.

How many of you have received training in A.N.P?

II Unit	
Under plan of operation in U.P. it is recommended that the training aspects of this programme must be developed in such a manner that it will eventually, make an impact at all levels in the community viz. at the State, District, Block and village levels and among all Planning, administrative and technical officers associated with the programme, teachers in colleges of Agriculture, Veterinary Science and Home Science, teachers in Gramsevak and Gramsevika Training Centres,	Talk.

Social Education Organiser Training Centres (now closed), Block Level Officials, Village Level Workers, members of Panchayati Raj Institutions, non-officials and voluntary organisation and above all the farmers and villager themselves. It is recognised, however, that it will take considerable time and study to achieve fully these objectives. In order, therefore, that the development of this programme at State, Block and village levels should not unnecessarily be delayed, it is agreed that, during the first phase of the programme, emphasis will be placed on the strengthening of education on the basic principles of nutrition, and the application of these to poultry management, dairying, fish culture, horticulture, home management, the planning and preparation of balanced diets, the increased production, utilisation and consumption of protective food stuffs and the supplementary feeding of vulnerable groups. Details of the training courses for the various categories of workers are given below:

Sr.No.	Category of trainees.	Place of Training	Total No. of trainees.	Duration.
1.	State Nutrition Officers.	All India Institute of Public Health Hygiene, Calcutta.	2	9 months.
2.	Instructors in Public Health in GTCs.	Provincial Hygiene Institute, Lucknow.	23	30 days.
3.	Instructoresses in Nutrition in GSTCs.	-do-	10	30 days.
4.	Instructors (other than in the Public Health) in GSTCs & S.E. OTCs.	-do-	115	14 days
5.	Instructresses(other than in Nutrition) in GSTCs & M.S.TCs.	-do-	30	14 days
6.	Medical Officers of Primary Health Centres.	-do-	29	21 days
7.	Principals GSTCs.	-do-	23	7 days
8.	Lady Health Visitors.	-do-	29	21 days
9(a)	Assistant Directoresses Social Welfare.	-do-	11	30 "
(b)	A.D.O.(W)	-do-	29	30 "
10.	District Level Officers and Adhyapikas of Z.P.	-do-	23	7 "
11(a)	Teachers of Normal schools.	-do-	50	14 "
(b)	Teachers of Girls Schools and colleges.	-do-	200	30 "
(c)	Extension Teachers.	-do-	50	14 "
12.	B.D.Os, A.D.Os, B.Os (P.R.D.) Sanitary Assistants and Progress Assistants.	Gramsevak Trg. Centre on Instt.	203	7 "

13.	Horticulture Inspectors.	Gramsevak Trg. Centre on Instt.	23	7 days.
14.	Gramsevaks	-do-	290	10 "
15.	Chairman of Shiksha Samiti of Z.P.	-do-	23	2 "
16.	Chairman Jan.Swastha	-do-	23	2 "
17.	Pramukh, Chairman Production & welfare Samities.	-do-	29	2 "
18.	Gramsevikas	Gramsevika Trg. Centre.	145	30 "
19.	Midwives	Block H.Q.	116	14 "
20.	Gram Laxmis	"	725	14 "
21.	Pry.School Teachers.	"	580	7 "
22.a)	Pradhans	"	2320	7 "
b)	Panchayat Secretaries.	"	290	14 "
23.	Mahila Mandal representatives.	"	4640	14 "
24.	Youth Club Members.	"	4640	7 "
25.	Fisherman in Pisci culture	"	680	10 "
26.	Poultry keepers.	"	2320	7 "
27.	Training of Operation in Poultry Equipment.	New Delhi	15	5 "

In this training programme UNICEF has provided assistance of equipment, supplies, and transport to training Institutes, Blocks and Regional Production Centres.

III Unit Production

Under this aspect following programmes have been undertaken. Talk.

(1) Poultry at -

(a) Regional Farms Babugarh, Bichpuri, Hawalbagh, Azamgarh, Faizabad and Nani Allahabad. The State Govt. provides money for construction of building, poultry farms, and feeding of breeds, while UNICEF provides special equipments.

(b) Poultry Extension Centres: They are established at different GTCs. They give training to poultry keepers for 7 days. Emphasis is given on the use of Deep litter system.

(c) Assistance to Individual poultry units.

(2) Piecicultures:

(a) At Block Level - This is proposed to stock an area of 1760 acres in the block adjoining the 17 GTCs. At each of these GTC 40 fishermen will be trained per block for a period of 10 days for which stipend will be provided by UNICEF.

In addition technical assistance will be provided for exploritation of stocked waters at the cost of owners. Assistance from block fund will also be provided for improvement of local nurseries and stocking ponds.

(b) Out of 17 GSTCs in six centres (Dohrighat, Chirgaon, Kalakanker, Jhusi (close) Mainpuri, Baraut) intensified programme is proposed.

(c) A state inland fishery centre will be established in Lucknow district.

(3) Village Milk Production and utilisation scheme.

(4) Horticulture and Food and fruit preservation.

(a) School and Community gardens.
(b) State Horticulture and seed production centres.
(c) Food and fruit preservation units.

The production of protective food is to be done at the village level in the following ways:

i) Setting up poultry unit;
ii) Production of fish in local tank;
iii) Establishing school orchards; and
iv) Setting up community orchards.

IV. Unit - Feeding or consumption — Talk

The beneficiaries of the feeding programme will include:

a) Expectant and Nursing mothers.
b) Pre-school Age children.
c) School children.

The village community should be educated to shoulder the responsibilities of providing nutritive food to its vulnerable groups through supplementary feeding programme. Steps will be taken to ensure that vegetables and fruits grown in the school gardens will be used as a means to educate the children in the dietry value and importance of protective foods for the maintenance of health. The pre-condition for a successful feeding programme at the village level is the existance of an active women's club in the village.

Application..

The teacher will inspire the pupils to apply this knowledge in improving their own messes.

5. Summarisation and recapitulation — Flannel strip.

There are three main aspects of A.N.P.

i) Training; (2) Production; and (3) Consumption.

6. Testing and check up

1. What are the three main aspects of A.N.P?
2. Give the important programmes under production aspect.

7. References

1. Plan of Operations for A.N.P. in U.P.
2. A.N.P. in India, UNICEF.

8. Assignment

Write a brief account of the various aspects of applied nutrition programme.

Lesson Plan No. 46

CONSTITUENTS OF FOOD

1. Objective

To emphasise upon the importance of food and to acquaint the pupils about the different constituents of food.

2. Previous background

Trainees have learnt about the objectives and three main aspects of A.N.P.

3. Aids to be used

Blackboard, chalk, duster, diagram, chart.

4. Presentation

Introduction.

What are the different aspects of A.N.P?

New Subject matter.

I Unit

Q. Why do we eat?

Our body is a complex machine. As a machine needs oiling so our body machine needs food. (i) It provides energy and heat to the body; (ii) It helps in building the different parts of the body; and (iii) That food is necessary for the repair or wear and tear in the body.

II Unit

Talk & chart.

Different constituents of food are:

a) Proteins: They are the chief substances in the cells of the body and form the important constituent of muscles and other tissues, and vital fluids like blood. They supply building material for the body and make good the wear and tear of tissues. This is why foods rich in proteins are often called body building foods. Protein is mostly found in milk, pulses, nuts, soyabeans, meat, fish and egg. According to modern concepts, the daily protein needs of an adult are adequately met by a provision in the diet of about one gram of protein per Kilogram of body weight.

b) Fat: Fat is of value to the body in a number of ways. It is a concentrated source of energy; as fuel it supplies per unit weight more than double the energy furnished by either protein or carbohydrate. Some fats provide the so called 'essential patty acids' to the body. It is found in butter, ghee, oil. For an adult 1½ to 2 oz. of fat is needed every day.

c) Carbohydrates: They are a class of substances which include Glucose, canesugar, milksugar, starch etc. They form the main source of energy to the body. Grain foods are largely composed of starch; cane sugar and glucose are hundred percentage carbohydrates. They meet the energy needs of the body.

III Unit

Diagram & chart.

d) Vitamins: Vitamins are organic compounds present in minute amounts usually in fresh natural stuff. They are essential for health and well being and are needed in very small amounts. They are considered to function as important links in several vital life processes. They are commonly named by letters of alphabets. They are also referred to by major function they perform. They are broadly divided into two groups based on their solubility - water soluble and fat soluble. Vitamin A.D.E.V. belong to the fat soluble group and Vitamins of the B complex and Vitamin C to the group of water soluble vitamins.

Vitamins are present in fruits, green vegetable, oil, milk and egg. They promote growth, prevent diseases and help in reproduction.

e) Mineral salts: The mineral salts needed for the body are taken through food stuffs. Important among them are calcium, iron and phosphorus. They help in the formation of bones, teeth and help in assimilation. They are found in green vegetables. Ordinary salt we eat and in fruits, and milk.

f) Water is also a very important ingredient of diet. It help in digestion.

Application.

The teacher will impress upon his pupils to incorporate all these necessary food constitudnts in their mess menu.

5. Summarisation and Recapitulation

Q. Why do we eat food?
Q. What are the main constituents of food?

6. Testing and check up

Q. What are body building foods?
Q. What is the function of fats and carbohydrates in our body?
Q. Name the important vitamins and also mention their sources?

7. Reference

The nutritive value of Indian foods and the planning of satisfactory diet by W.R.Aykroyd - H.M.R.

8. Assignment

Examine your todays menu and mention what constituents of food you could get out of it.

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Lesson Plan No. 47

BALANCED DIET FOR DIFFERENT AGE GROUPS AND WORKING CLASSES

1. Objectives

   1. To make the pupils appreciate the need of balanced diet.
   2. To give them different tables of balanced diet for various age groups and working classes.

2. Previous background

   Trainees have learnt about the constituents of food.

3. Aids to be used

   Black board, chalk, duster, roll up B.B. charts and diagrams.

4. Presentation

   Introduction

   i) Name the various ingredients of food.
   ii) In which food stuff they are found?

New subject matter.

I Unit

Comparative chart of actual intake as . recommended.

The chart showing the actual intake and recommended calories (a measurement of heat) will be put up before the class to enable them to understand for themselves that our usual diet is deficient in many respects.

Food stuff	Recommended (in oz.)	Actually taken (in Oz.)
Cereal	14.0	16.6
Pulses	3.0	2.3/2.4
Leafy vegetables	4.0	0.7/0.9
Other "	3.0/6.0	3.2/4.1
Ghee/oil	1.0/2.0	0.5/0.9
Milk	6.0/10.0	3.3
Fruits	2.0/3.0	0.2/0.6
Sugar	2.0	0.7 W.B.
Condiments	-	0.4
Meat/fish/egg.	4.0	0.9

1 oz. = ½ cha. or 28.4 grs.

This table will be examined and analysed by the trainees with the help of the instructor.

II.Unit - Terms explained.

Roll up B.B.

a) Balanced diet - Is one which contains all the constituents of food in right proportion and provides required number of calories.

c) Carbohydrates: They are a class of substances which include Glucose, canesugar, milksugar, starch etc. They form the main source of energy to the body. Grain foods are largely composed of starch; cane sugar and glucose are hundred percentage carbohydrates. They meet the energy needs of the body.

III Unit — Diagram & chart.

d) Vitamins: Vitamins are organic compounds present in minute amounts usually in fresh natural stuff. They are essential for health and well being and are needed in very small amounts. They are considered to function as important links in several vital life processes. They are commonly named by letters of alphabets. They are also referred to by major function they perform. They are broadly divided into two groups based on their solubility - water soluble and fat soluble. Vitamin A.D.E.V. belong to the fat soluble group and Vitamins of the B complex and Vitamin C to the group of water soluble vitamins.

Vitamins are present in fruits, green vegetable, oil, milk and egg. They promote growth, prevent diseases and help in reproduction.

e) Mineral salts: The mineral salts needed for the body are taken through food stuffs. Important among them are calcium, iron and phosphorus. They help in the formation of bones, teeth and help in assimilation. They are found in green vegetables, Ordinary salt we eat and in fruits, and milk.

f) Water is also a very important ingredient of diet. It help in digestion.

Application.

The teacher will impress upon his pupils to incorporate all these necessary food constituednts in their mess menu.

5. Summarisation and Recapitulation

Q. Why do we eat food?
Q. What are the main constituents of food?

6. Testing and check up

Q. What are body building foods?
Q. What is the function of fats and carbohydrates in our body?
Q. Name the important vitamins and also mention their sources?

7. Reference

The nutritive value of Indian foods and the planning of satisfactory diet by W.R.Aykroyd - H.M.R.

8. Assignment

Examine your todays menu and mention what constituents of food you could get out of it.

.. ..

Lesson Plan No. 47

BALANCED DIET FOR DIFFERENT AGE GROUPS AND WORKING CLASSES

1. Objectives

    1. To make the pupils appreciate the need of balanced diet.
    2. To give them different tables of balanced diet for various age groups and working classes.

2. Previous background

    Trainees have learnt about the constituents of food.

3. Aids to be used

    Black board, chalk, duster, roll up B.B. charts and diagrams.

4. Presentation

    Introduction

    i) Name the various ingredients of food.
    ii) In which food stuff they are found?

    New subject matter.

I Unit

Comparative chart of actual intake as recommended.

The chart showing the actual intake and recommended calories (a measurement of heat) will be put up before the class to enable them to understand for themselves that our usual diet is deficient in many respects.

Food stuff	Recommended (in oz.)	Actually taken (in Oz.)
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Pulses	3.0	2.3/2.4
Leafy vegetables	4.0	0.7/0.9
Other "	3.0/6.0	3.2/4.1
Ghee/oil	1.0/2.0	0.5/0.9
Milk	6.0/10.0	3.3
Fruits	2.0/3.0	0.2/0.6
Sugar	2.0	0.7 W.B.
		1 oz.: ½ cha. or 28.4 grs.
Condiments	-	0.4
Meat/fish/egg.	4.0	0.9

This table will be examined and analysed by the trainees with the help of the instructor.

II. Unit - Terms explained.

Roll up B.B.

a) Balanced diet - Is one which contains all the constituents of food in right proportion and provides required number of calories.

b) Under Nutrition is the condition which result when insufficient food of any kind is eaten. In extreme cases it is called starvation. It is associated with poverty.

c) Mal-nutrition: It relates to state when sufficient foods eaten to prevent hunger but the food stuff eaten do not supply adequate or balanced amounts required for normal growth.

d) Protective foods: are those foods which protect us against nutritional diseases, give strength and maintain body.

III Unit

Talk and chalk.

Body requirements of different constituents of food are as below:

Protein -	1 gram per kilogram of weight
Fats -	45.60 gram per day.
Carbohydrates -	14 oz.
Minerals -	Ca: 68 gr.
	Ph: 1 "
	Fe: 20-30 gr.
Vitamins	A 3000 - 4000 1/0
	D 400 - 800
	C 30 - 50

Water: Apply 6 lbs. per day.

Caloric requirements for an average adult is 2100; for a pregnant lady 2400 calories and for lactating mother 3000 calories. Children require 1500 calories.

Persons doing	ordinary labour	need	50 caloris	per hour
"	average	"	50-100	" "
"	Hard	"	100-200	" "
"	Very hard	"	200 +	" "

IV. Unit

Table.

Composition of a balanced diet of an adult per day.

Food stuff	Grams	Ounces
Cereal	400	14
Pulses	85	3
Leafy vegetables	114	4
Root	85	3
Other	85	3
Milk	284	10
Sugar	57	2
Ghee	57	2
Fruit	85	3
Meat Egg.	40	1½

N.B. 100 grams 3.5 oz. or 8.62 Tola.

Recommended Daily calories for different categories and age groups.

Man 55 Kg. or 120 lbs.

Woman	i) Sedentary work	2000
	ii) Moderate work	2300
	iii) Heavy work	3000
	iv) Pregnacy (latter Half)	2300
	v) Lactation	2700
Children	Upto 6 months	120/Kg or 600 calories
	7 to 12 "	100/Kg. or 800 "
	1 to 3 years	1200
	4 to 5 "	1500
	5 to 6 "	1600
	6 to 9 "	1800
	10 to 12 years	2100
Adolescents		
	13 to 15 years	
	Girls	2100
	Boys	2500
	16 to 19 years	
	Girls	2100
	Boys	3150

With the help of the above tables, the teacher will enable the pupils to understand the daily requirements of food for different age-groups and working classes.

Application.

On the basis of the above understanding the Instructor will ask them to supplement the deficiencies if any in the mess menu.

5. Summarisation and recapitulation

Q.No.1. Explain the terms - balanced diet and protective food.
" 2. What is the difference between under nutrition and mal-nutrition?
" 3. Give the calories requirements per day of the average man, woman, adolescent and child.

6. Testing and check up

Q.No.1. In what respects our daily diet falls short of recommended requirements?
" 2. How can you supplement it.Give specific alternations.

7. References

1. Special report series No.42 by I.C.A.R.
2. A.N.P. in India., UNICEF.

8. Assignment

When you go home, recommend possible alteration in your family diet and try to convince the members about it.

Lesson Plan No. 48

COOKING METHODS

1. Objectives :

   i) To increase the wholesomeness of food by destroying harmful bacteria and practices.

   ii) To increase taste, flavour and palatability.

   iii) To increase digestibility.

2. Previous background.

   Students know how to select food materials.

3. Aids to be used;

   Chalk - chalkboard.

4. Presentation of the topic :

   Introduction :-

In order to become usable, food must undergo some physical and chemical changes, through processes such as cooking digestion, absorption and metabotism. Cooking is the first step in making food available to the body.

Presentation :-

Cooking is the preparation of food by the application of heat. Primitive people placed their food in between stones made hot by the sun. After the manufacture of pottery, the present day cooking methods were evolved.

Effect of cooking :-

Heat affects food in many ways. Cooking increases the digestibility and flavour of starch which when dry becomes insoluble in water and difficult to digest. When dry heat is applied starch becomes more digestible. When cooked with moist heat, cereals absorb water, swell and become soft. Sugar is converted into a combination of glucose and fructose;when subjected to dry heat it becomes syrup and finally [illegible] brown /becomes and develops chocolate flavour.

When heated to a very high temperature, fats decompose, change flavour and impair the health of the digestive tract.

Some foods lose their nutritive values in cooking. The loss depends upon the solubility of the particular food in water. Exposure during cooking and adding baking soda destroy vitamins. So to get vitamins it is better to eat some fruits and raw vegetables. Suggestions in retaining maximum nutritive value of food during cooking are given below:-

i) Since most vitamins and mineral of fruits and vegetables lie just beneath the skin, it is desirable to cook with the skins or peal them lightly.

ii) Vegetables should be cut just prior to cooking or serving. They must be cut in as big pieces as possible to reduce the surface exposed to an boiling water.

iii) Minerals, vitamins and colours are lost during long cooking. Very little water should be used for soaking and the cooking time should be minimum. Cooking in too much water and for too long leads to loss of nutrients.

iv) Vegetables look better, taste better and have more food values if they are added to boiling water and cooked for shortest time i.e. 10-20 minutes.

v) Soda destroys vitamin B and Vit.C.

vi) Cook meat, eggs and other protein food at low temperatures, since protein gets hardened at high temperatures.

vii) Soak dry foods such as dal and dry beans in water before cooking and use that water for cooking.

viii) Water in which vegetables are boiled is usually thrown away. Since it contains valuable minerals, it should be used in cooking.

ix) No air should be introduced into hot foods as it destroys vitamin C.

x) Vegetables once cooked should not be reheated.

Cooking medium :-

i) Food is cooked on direct heat or indirect heat.

a) Direct heat - The surface part of the food material is put on the direct heat, such as bread is toasted.

b) Indirect heat - Food may be cooked through cooking medium of air, water and steam, fat or combination of one or more of these methods.

A) Air as medium :-

i) Baking: Dry chapati, bread, biscuits, and pasteries are prepared through this method.

ii) Roasting: Groundnuts, grams are roasted.

B) Cooking with water :-

i) Boiling with little water: Usually green leafy vegetables such as cabbage, amarnaths, spinach, green peas, green beans etc. are cooked with small quantity of water.

ii) With large amount of water : Cereals such as rice, dals, legumes, grams and potatoes are boiled in large amount of water.

iii) Stewing is cooking in water. The water covers the materials to be cooked and the lid covers the cooker. Meat is usually stewed.

C) Cooking in steam :-

Steaming : It is cooking in the steam arising from added water. Vegetables, fruits, fish are steamed.

Double boiling : A pot containing vegetable is put over another carrying boiling water.

Waterless cooking : It is cooking in steam formed from water originally present in the food.

Pressure cooking :-

In pressure cookers, steam generated during cooking is retained which, by shortening the duration of cooking, helps to conserve nutritive values, colour, flavour and palatability of food.

Cooking in fat:-

i) Deep fat frying : It involves cooking foods, in considerable quantity of fat heated to a very high temperature. Such as pakoras, puries, potato chips etc.

The nutritive value of fried foods is usually low.

ii. Shallow fat frying: Less fat is used. Omelettes and some vegetables are prepared by this method.

iii . When a minute quantity of fat is smeared on the frying pan and food is spread on it, and cooked, the method is called panning. Parothas and pan-cakes are examples of panning preparations.

iv. Cooking in which more than one medium is used:-

In this way, any material can first be fried and then boiled. Or it can be first steamed and then fried. Potatoes can first be boiled, then fried and after that can be boiled with a little water.

The points to be remembered while choosing a cooking medium are:-

1. Vitamin C is destroyed by heat and exposure to air.
2. Vitamin A is destroyed by intense heat and exposure to air.
3. The water soluble vitamin B is not stable to heat.
4. Riboflavin is not stable to light.

Therefore, only mild heating should be applied for cooking vitamin-rich foods.

Summarisation:

1. Protein gets hardened, increases the digestibility and flavour of starch. Dry heat applied to roast or toast the starch makes it digestible. When cereals etc. cooked in moist heat, they become soft. Sugar converted in to glucose and fructose. When heating to a very high temperature, fats decompose, change flavour. Some foods lose their nutritive value.

2. Foods should not be cooked for long time and on high temperatures.

3. Foods are cooked through different methods:-

(a) Air: i. baking, ii. roasting.
(b) Water: i. Boiling with little water, ii. boiling with large amount of water, iii. Stewing.
(c) Steam: i. Double boiling, ii. Water less -cooking
(d) Presure cooking.
(e) Cooking in fat: i. deep fat frying, ii. shallow.
(f) fat frying.
(g) Cooking in which more than one media is used:

5. Testing:

1. What are the effects of cooking of food.
2. What are your suggestions in retaining vitamins during cooking.
3. Which are best mediums of cooking vegetables.

6. References:

1."Text book of Home Science." by Rajamal P.Devadas. Pages 116 to 118.
2. Food selection and preparation by Marion Deyol. Pages 145-152.

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Lesson Plan No. 49

DIET FOR AN INFANT FROM BIRTH TO ONE YEAR

1. Objectives

1. To maintain good physic of an infant.
2. To help him in proper growth & repair of his tissues.
3. To protect him against ill health.
4. To build bones, blood & teetch etc.
5. To build good habit of timely eating.

2. Previous background

Upto one year usually babies are totally dependent on mothers milk which affects their health as well as their mothers.

3. Aids to be used

i) Blackboard; (ii) Chalk and charts.

4. Presentation

Introduction.

An adequate diet is necessary for a child's health growth and development. His present health and to a large extent his future well being depends on the food that he consumes during these formative years.

Presentation of the new subject matter.

Most Indian infants are breast fed because it is cheapest and most whole-some and easily digestible food for the infants. When mothers breast feed their babies they have to be careful to see that their own diet is whole-some.

The feed should be given at regular intervals. They can be of three hours but later on they can be more.

Mother's milk is the best food for infants and can be given up to 9 to 12 months. If baby cannot be breast fed for any reason, it is common practice to give goat's or cow's milk diluted with water. It is generally given in feeding bottles so it is very important to sterlize the bottle and wash the rubber nipple properly. Upto 2 months, let all food be milk. It should be given at 6.00 am, 9.00 am, 3.00 pm, 6.00 pm and 9.00 p.m. give boiled water in the middle of the foods.

Three weeks infant should also be given fruit juice for vit.C. such as orange juice or tomato juice to prevent scurvey. Start the baby on 1¼ tea spoon of the juice

diluted with cold but boiled water. Gradually increase the quantity. It should be between 9.00 am to 12.00 noon feeds.

When baby is of one month second protective food ¼ tea spoon of codliver oil should also be introduced.

After two months start mashed rice or bread ¼ tea spoon mixed with milk.

Three months old baby can take fruit and egg-yolk too at about mid-day.

After four months, baby is ready to take vegetable too in addition to milk, fruit and egg. If is totally depending upon mothers milk then introduce cow's milk. A little starch in the form of barley water or mashed rice may be added to milk. Increase the quantity of fruit juice and codliver oil.

From the sixth month onward the diet pattern should be as follows:

Early morning	Milk
9.00 am	Cereal food with milk, egg.
11.00 am	Fruit juice
Mid day	Milk
Afternoon	Milk
Evening	Milk and cereal, vegetable
Night	Milk.

From the eight months onward upto one year the diet pattern will be as follows:

6.00 am	Milk
9.00 am	Milk, rice, soji, bread, soup.
11.00 am	fruit juice
Noon.	Milk, chapatti, greens, butter, Milk, fruit.
4.00 PM	Milk and home made eatables. Avoid too much of chilies and fried things.
Night.	Milk, chapati, soup, vegetable &

CHART SHOWING FOOD SUPPLEMENTS FOR NORMAL INFANT

Food/age	2 weeks	3 weeks	1 month	2 months	3 ms.	4 ms.	5-6 ms	7M	8-12M
Mother's milk.	mm	mm	mm	mm	mm	mm	mm	mm	mm
Fruit juice		1¼ Tsp*	2 Tsp.	4 Tsp	6 Tps.	3 Tsp.	4 Tsp	5 Tsp	6 Tsp
Codliver oil		¼ "	[illegible] "	½ "	½ "	½ "	½ "	½ "	½ "
Masched rice or bread			¼ "	½ "	1-2"	1-2"	2-4 "	3-6"	
Egg yolk					1/4	½	½	½	¾
Fruit					½ "	½ "	½ "	2 "	3 "
Mashed vegetable						½ "	1 "	1 "	2 "
Chapati or break						As much as he can eat.			

* Tea spoon

After first year: The diet resembles the diet taken by the adult but unusually heavy foods and oily foods should be avoided.

Children should not be given eatables in between the feeding hours.

5. Summarisation

1. The diet of the feeding mother should be wholesome.
2. The feeds should be given at regular intervals of 3-4 hours.
3. Mothers milk is the best food for the child upto 9 months to one year.
4. Up to 2 week only milk and boiled water should be given.
5. In the third and fourth week add two protectives fruit juice and codliver oil.
6. After 2 months start mashed rice or bread.
7. After 3 months give egg-yolk and fruit.
8. After 4 months increase the quantity of all the above things introduce cow's milk and vegetable.
9. After 6 months quantity of cereals can be increased.
10. After 8 months bread and chapati can be given.
11. After first year the diet will be just as taken by adults. Avoid much chillies and oily things.

6. Testing:

1. What food will be given to four months old child?
2. After one year what diet is to be given and what precautions should be taken?
3. What will be the best timings to feed the child?

7. Assignment

Plan the diets of 6 months old child for a whole day.

8. References.

1. Mother craft and child care by Dr.M.Prabhu - Page 35 to 59.

2. Text book of Home Science complied by Rajammal P.Devadas Page 295 to 300.

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Lesson Plan No. 50

SALAD

Objectives:

i) To serve natural and nutritive food with the diet.

ii) To make food more appetizing and palatable.

iii) To serve fresh vegetable with the food.

iv) To present an economic but attractive dish.

Previous background.

Students know that balance diet must include vegetable

Aids to be used:

Chalk, Black board, Flannelgraph.

Presentation of topic:

A) Introduction :-

The food which we eat serves two purpose;

i) Builds the body:-

Some of the food materials have calcium and phosphorus which builds the bones, some have protein which builds muscles, others have iron which is good for blood.

ii) Protects the body:-

For it vitamins A.B.C.D. are to be taken. They are mostly found in vegetables and fruits.

B) Presentation :-

i) Need of salad:-

Vitamins are destroyed easily by cooking in the high temperature. So uncooked vegetables should be taken along with the food. We call it salad.

ii) Constitutes of salad:-

Salad is prepared from those vegetables which can be taken raw such as tomatoes, carrots, radish, turnip, salad leaves, cauli-flower, green peas, onions, lemon, ginger etc. in winter

In summer we can use tomatoes, onions, cucumber, lemon, boiled potatoes, mint.

iii) Nutritive value:-

Vegetable:-	Nutritive value:-	Protective value:-
Tomato	Vit.A.C. and iron.	Protects inflamation of eyes and lungs and scurvy. It enriches the blood.
Carrot	Vit.A. Calcium, iron.	Protects inflamation of eyes and lungs. Makes the bones strong, enriches.
Radish	Calcium	Blood makes the bones strong.
Potato	Carbohydrate calcium Vit.C.	Gives energy. Good for bone building and making strong. Good appitizer.
Onions	Vit.C. Iron Calcium.	For preventing scurvy anemia and weak bones.
Lemon	Vit.C. and Calcium.	Prevents scurvy and weak bones.
Green chillies.	Vit.C	Prevents scurvy.

iv) It is not enough to be a dish tasty only, it should also be served in an attractive way; for that it should be decorated in a dish. To decorate salad select vegetables of different colours as green leaves, yellow radish and white radish or onions, red tomatoes etc. A plan to be designed before hand according to the occasion. According to it select fresh locally available vegetables considering colours, taste and design. Then it should be cut according to design and decorated.

v) Constituents of good salad:-

a) Nutritive value:

It should have nutritive good qualities, then only, it is good for our health. Raw vegetable is preventive for our body. It has Vit.A.B.C.D.

b) Sanitary quality :

Manure is put in the soil, so there is a danger of food borne diseases to go into stomach with uncooked food. Therefore it is very necessary to wash vegetables with potasium parmagnet before preparing salad.

c) Fresh vegetables will make a good and tasty salad.

d) Digestibility is very necessary. If lot of carrots are taken it will upset the stomach. A salad should have enough tomatoes and lemon juice so that it may become digestible and the food too may also digested easily.

e) Palatability :-

To make a salad palatable, vegetables of different taste and flavour should be used as sweet radish, hot onions, sour tomatoes and lemon flovory things as mint, corenthus, ginger etc.

f) Balanced :-

It should be a balanced salad from the point of nutrition, taste and colour. Too many onions and only one tomato is not a balanced salad.

g) Economical :-

The vegetable which are coming into the market in abundance should be used for salad, otherwise salad will be an expensive dish and will be served occasionally. If it is economical dish it can be taken often.

h) Attractively decorated:-

Nicely decorated dish is a good appitizer, it attracts the person to eat it.

Summarization :

Vitamins are destroyed by cooking so raw vegetables should be taken.

Salad can be prepared from the vegetables which can be taken raw and are available in the market.

Raw vegetables mostly have vitamins, irons and calcium.

Vitamin - A : prevents inflamation of eyes and lungs.

Vitamin - B : is good for appitize.

Vitamin - C : prevents scurvy and gives strength.

Vitamin - D : prevents Beri Beri.

Iron prevents anemia.

In decorating salad taste, colour, flavour and design should be kept in mind.

A good salad constitutes:-

Nutritive value.
Sanitary value.
Fresh vegetable.
Digestibility.
Palatability.
Economic value.
Attractive value and it should be balanced.

<u>Testing and check up</u> :

i) Is it necessary to take salad? Why ?

ii) What are the food values found in tomato, carrot and onion?

iii) What constitutes a good salad?

<u>References</u>:

i) Tested ways to health. Pages 45 to 48, 55,61,62.	H.C.Menkel S.B.Whitehead L.E.Eubarks R.P.H.Charlton
ii) Food selection and preservation. Pages-207 to 220.	Marion Deyoe Sweetman Ingeborg Mackellor.

METHOD DEMONSTRATIONS

Another assignment given to the participants during the course is the preparation of Method Demonstration outlines. According to the syllabus of the Gramsevak Training Centres some of the items included under practicals have been taken up as Method Demonstrations during this course. Again the topics in these demonstrations have been limited to the area in the syllabus for the subject of Agricultural Extension.

In the following pages will be found fourteen topics that have been selected for Instructors who have been assigned the subject of Agricultural Extension. These are again attempts to emphasise upon the various steps as well as the subject matter required for conducting demonstrations.

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Method Demonstration No:1.

HOW TO CONDUCT PANEL DISCUSSION

Objectives:-

i) It is a group teaching methods.

ii) It is a better media to present a subject in a dramatic and active way.

iii) Useful method to define points of agreement, areas of disgreement and approaching consensus.

iv) Creates informal atmosphere for communications with the group.

v) Suitable for large groups.

vi) Creates better atmosphere for audience participation.

vii) Creates better interest in problems and issues.

viii) Force a group to face a controversial issue and stimulate to join in problem solving.

Date Time Place

Material required:

i) Black board.
ii) Symbols for panel members and chairman.
iii) Other aids.

Demonstration break up.

What is panel discussion : -

A panel is a small group discussion, made up usually of a chairman and from 4 to 8 members which conduct discussion among its own members as a prelude to a discussion in which the audience takes part.

Steps	Key points
i) Seating arrangement.	Panel member should sit in a semi circle way so that each may see all other in the panel. In the panel, group should not be far away.
ii) Chairman alongwith members take seat.	Chairman in the centre with panel members around a table facing the audience.

iii)	Introduction of the panel members by the chairman to audience one by one, with their background.		If moderator and chairman are different, chairman will introduce moderator and moderator will introduce panel members.
iv)	Introduction of problems by the chairman.	a)	Scope and procedure of the discussion should be made clear to the audience.
		b)	Subject should be controversial one.
v)	Chairman will open discussion with a question or statement.		Chairman will not express his opinion on any statement or point.
vi)	Discussion by panel members.	a)	Every member will speak only on one topic for 2-3 minutes at a time.
		b)	Chairman should clarify, interpret, summarise push discussion onward.
		c)	Panel members should be qualified.
vii)	Chairman will invite audience participation after major points have been developed.	a)	Group can participate by asking questions or contributing in the subject.
		b)	Spirit and method of panel should prevail.
viii)	Chairman will present a general summary.		

Precautions:

i) Select moderator and panel members carefully.

ii) It should be able to present different facts of the problem.

iii) Moderator should prepare in advance short and simple outlines of the points to be covered.

iv) Don't allow any one or two to monopolise discussion.

v) Allow enough time to panel.

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Method Demonstration No:2

HOW TO CONDUCT OPPOSING PANEL DISCUSSION?

1. Why the subject is important?

1. Panels are excellent for presenting controvertial subjects.
2. This techniqua can be used in class-room and in other groups to get the involvement of the members.
3. This technique creates healthy sense of competition which is very conductive tó learning.
4. It creates an atmosphere for free interchange of opinion.
5. It reduces stage fright of the individuals who would otherwise hesitate to discuss and speak in public.
6. It creates valuable stimulus to thinking.
7. It gives the feeling of actual and active participation.
8. Suitable for small and as well as large groups.
9. To get different facts and points of view brought into a discussion frame work.

2. List of equipments and material needed:-

1. Chalk board.
2. Chairs.
3. Semicircular table.
4. White sheets of papers and pencils etc.

3. Demonstration breakdown:-

Important steps.	Key points.
1. Seating arrangements.	1. The panel should be seated in such a way (e.g. a semicircle) that every one can hear and see the others without turning away from the audience.
	2. Audience can also see and hear without straining.
	3. The moderator sits in the middle and the panel members on his either side.
	4. Seat lively speakers at the ends and quiet ones in the middle.
	5. Audience should be seated as close to the panel as possible.
2. Selection of panel members:	1. Members should have a clear and concise manner of speaking.

2. Persons who can talk lound enough to be heard.

3. People who are qualified to talk about the topic.

4. Persons selected may represent sufficient different ideologies.

3. Introduction of the panel members.	The moderator will introduce the panel members and their complience on the subject.
4. Introduction of the subject.	A brief and stimulating initiation of discussion by the moderator. He should not express his opinion on either side.
5. Discussion by panel members.	1. Panel members should speak for 2-3 minutes and avoid speech making. 2. Moderator may clarify the impact and summarise to push discussion ahead. 3. Moderators may ask challenging questions to stimulate thinking. 4. The questions should involve why of the subject rather than being answered in yes or no. 5. The moderator should dig out points of difference and agreement. 6. He should see that discussion is not aimlesly stays on the subject. 7. At the end call on the members to help him sum up.
6. The chairman will insist participation of the audience.	The doubts or questions may be answered by any member of the panel or the moderator.

7. The session is brought to be a close with a brief summary.

Precautions:

1. Avoid emotional clashes.
2. Avoid speech making.
3. Brief the panel members about the subject before the start of the discussion.
4. Do not use argumentative manners.

References:

1. Discussion methods by Gue Land pp.140-144.
2. Leadership and Dynamic group action. By Beal and Bohn Pages 206-221.
3. Extension Education in Community Development. Pages 354-55, by Directorate of Extension.

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Method Demonstration No: 3

THE INTERROGATOR PANEL

1. Why the subject is important?

1. It is less time consuming method.
2. Many questions can be covered within a short period.
3. If well organised, it is very interesting.
4. Through this method, high professional ability and knowledge of the experts are utilized.
5. All round development of one problem is possible.
6. It can be utilized at the training centre as well as in the villages.

2. Place Date and Time.

3. List of equipments and material needed:-

1. Chairs, 2. Table, 3. Call bell,
4. Paper, ink, pencil etc.

4. Demostration breakdown:

Important steps.	Key points.
1. Moderator will introduce the subject to the group.	1. Introduction should be brief and effective.
2. Moderator will introduced the panel members.	2. It should be brief and to the point.
3. Moderator will [illegible] the subjects by posing general question which starts the discussion.	3. The question should be of general nature.
4. Questions will be put up by the interrogator step by step and the interrogator will answer them.	4. The moderator will see that the questions are direct and simple straight forward and answers are to the point.
5. Chance for clarification will be given.	5. Moderator will see that it does not become a discussion, time consuming process.
6. Moderator will summarise the whole discussion.	6. Summary will be short and will contain the whole point.
7. The moderator will give thanks to the interrogators panel members and the audience.	

Subject of discussion through interrogator panel. Family Planning.

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Method Demonstration No: 4

HOW TO ORGANISE SYMPOSIUM

1. Why subject is important?

i. It helps to prepare a group for problem solving and decision making.

ii. It is an essential part of teaching and learning.

iii. It ensures better communication.

iv. It divides a problem in - logical components parts.

v. It introduces a wider variety of experiences and knowledge of the complex subject.

vi. It atracts attention, creates interest and suspense and make subject easy to understand.

vii. It gets greater involvement on the part of the audience and inspire them to action.

2. Place, date and time.

3. List of equipment and materials required:

1. Name plates of five speakers and moderator.
2. Five chairs and one table.
3. P.A.E. Set.
4. Roll up black board.
5. Call bell.

4. Breakdown:-

Important steps.	Key points.
1. Anouncement of the subject and its suitable phasing to the audience.	1. Subject will be on Applied Nutrition programme.
2. Selection of 2 to 5 speakers and allotment of phasing to them.	2. Phasing will be as follows:- a. Importance. b. Training. c. Production. d. Consumption.
3. A moderator is to be selected.	i. Only experts on the subject should be selected. ii. Phasing should be done in a way so that no part be left. iii. The arrangements of seating should be ensured before hand so that they are visible and audible to all.
4. The speakers are to be selected.	iv. Moderator will be in the centre.
5. Introduction of the speakers alongwith their phasing assignments.	v. Phasing assignments will be written on the black board.

6. Moderator will initiate the topic and will give brief introduction about need of the subject and their request to the speakers to speak on their given topic within the time limit:

vi. Speakers given chance to speak one by one.

7. Moderator will keep proper control over the performance and summarises it in the end to the audience.

vii. They will be allotted 5 minutes to speak.

viii. Moderator will keep proper watch on the speakers.

5. Precautions:.

1. The method of communication and language used by the speakers should be easy to understand.

2. Time and subject should be under control.

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METHOD DEMONSTRATION NO. 5

HOW TO ORGANIZE A BUZZ SESSION

Why the subject is important

1. It is a group method of teaching.
2. It is an informal device for discussion.
3. It provides total participation to the members.
4. It is easy to be set up.
5. It provides a skill for worker to pull the experiences of all the members of a group on various aspects of a problem or subject.

Place, date and time.

List of equipment and material needed

1. Paper slips.
2. Bell - one.

What is a Buzz session

It is a two persons discussion method. It is called "Buzz" due to the noise created by the members during discussion period like a bee. The technique is used as an alternative method of breaking a large group into small segments to facilitate discussion and pulling of the members view points on the various aspects of the subject or problem.

This method may be choosen to provide maximum opportunities for individual participation and to consider many separate aspects of a subject problem.

Domonstration breakdown.

Important steps	Key points.
1. Setting up the groups.	1. A group of two persons will be made by a simple "Count off" method.
2. Select recorder cum-reporter in the group.	2. Group itself will decide who will record and report the discussion.
3. Distribute problems among the group.	3. i) Written slips or paper may be distributed to/group. ii) One aspect of the the problem to one group will be distributed.
4. Remind the 'time allowance' for discussion.	4. The leader may remind (Teacher).
5. Discussion by the group.	5. i) Discussion may not disturb other groups. ii) The leader may move among the group to be available for clarification, if needed.
6. Report by the group.	
7. Summarising the discussion.	

6. Every group will present its opinion one by one before the group.

7. The leader will summarise the various points of view.

<u>Precautions</u>

1. Warn against the loud noise during the discussion.

2. One member should not dominate the other.

3. Time may be extended if needed by the group but should be shorter.

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Method Demonstration. 6

HOLDING OF YOUTH CLUB MEETINGS

Objectives:

i) To provide opportunity to youth club members for the successful conduct of their meetings.

ii) To enable the youth club members and office holders to shoulder their responsibilities judiciously.

iii) To help the youths to learn the democratic system of working and develop faith in it.

iv) To guide the youth club members in running the various activities of their club on progressively systematic lines.

v) To prepare the youths to become the useful members of the society in their adult life.

vi) To develop leadership qualities in the rural youth.

Date Time Place.

Material required:

a) Chalk, duster, wall black board, roll up black board, call bell, membership form, safety pins, identity cards, Ink stand, paper pencils for the members. Agenda copies, Club sign board, record books. Proceeding, cash Project. Membership.

b) Persons for acting as President, Vice President, Secretary, Treasurer, Joint Secretary, Project leader, Youth leader and Pradhan.

Demonstration break-down:

Steps	Key points.
i) Prepare for the meeting by occupying respective places or chairs.	The office bearers should occupy their respective places. The President, Vice President, Secretary Treasurer, Joint Secretary Project leader, Youth leader and Pradhan.
ii) Start with prayer.	The prayer of the club will be recited by all standing at the initiation of the President.

iii) Secretary to take roll call.	Members will respond by giving a new information in turn.
iv) Get the proceedings of the last meeting read and confirm.	The minutes of the last meeting will be ready by the Secretary passed by the members and signed by the President.
v) Enrol new members, if any.	The Pradhan gaon sabha will administer 'pledge' of the club to the new comer.
vi) President to initiate the agenda of the present meeting.	Items to be discussed one by one and final decision recorded by the Secretary.
vii) Report of the Treasurer. a)	The treasurer will read out the report of income and expenditure of the club during last month.
b) Report of the Project leader (Agriculture) under review of the progress made in different projects.	A report of work done during Rabi programme will be read out by the Project leader (Agri. and so on.
c) A timely message to youth members by the Extension Officer (Animal Husbandry).	The invitee Extension Officer (Animal Husbandry) of the attached centre will tell about the advantages of the poultry keeping.
d) Draw the programme for the Republic day celebration 26th Jan.	The members will discuss and finally draw out the details of the programme for celebrating 26th Jan. (It will be done on democratic lines).
e) Any other item, with the permission of the President.	Time permitting, the President will reply to the querries made by the members.
viii) Closing song and slogans at the President's initiative.	'Nav Nirman Karo' song will be sung in Chorus and a few suitable slogans will be raised.

ix) End with thanks.	The President will close the meeting with thanks to the members.

Summary:

a) Testing and understanding by the demonstrator.

b) Procedure of the youth meeting to be summarised. Seating arrangement, prayer roll call, confirmation of the proceeding of last meeting, new membership, agenda of the present meeting, closing song, slogans and thanks giving.

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Method Demonstration No. 7

HOW TO HOLD GAON PANCHAYAT MEETINGS IN UTTAR PRADESH

1. Why the subject is important

At the village level, gaon panchayat is an important institution through which the extension programme may be pushed in. The panchayats conduct their business by holding meetings and successful me tings go a long way in furtherance of Extension programme. This will make job of Village Level Worker easier.

2. List of equipments and material needed

1. Agenda register.
2. Proceeding book.
3. Call bell.
4. Chalk board.

3. Demonstration breakdown

Important steps	Key points
1. Circulate agenda in time.	1. It should reach to each and every member atleast 5 days before the meeting is scheduled to be held. 2. Obtain signatures of the members on agenda register.
2. Make proper sitting arrangements.	1. Pradhan should be given central seat and others may be provided seats around him, so that every one of them may see each other. 2. In the absence of Pradhan, Up-Pradhan will officiate as Pradhan and conduct proceedings. In the absence of both of them, the members present may select one amongst themselves to preside over the meeting. 3. In sitting arrangements, there should not be any discrimination on the basis of caste etc.
3. The Pradhan will see if the quorum is complete.	1. The number of the members of present should not be less than 1/3rd of the total strength.

4. When the quorum is not complete, the pradhan will adjourn the meeting and fix another date.	1. In this case the information of the date should go to each and every member well in time.
5. In case the quorum is complete, the pradhan will ask the Panchayat Secretary to read the proceedings of the last meeting.	1. After reading the proceedings, the Pradhan will get it confirmed by the members and will put his signature in token of its being confirmed.
6. Panchayat Secretary shall write the proceedings simultaneously.	1. The proceedings are to be written in Hindi.
7. Other items of agenda are to be discussed one by one.	1. Opportunity should be given to the members of opposite group, if any, to express their views and their views should find place in proceedings.
8. The Pradhan should persuade the shy participants to take part in the discussion.	-
9. The Pradhan should provide for unanimus decision after discussion otherwise put to vote.	
10. In the end, opportunity should be given to the members and discuss any matter of common interest which has not been discussed before.	
11. The meeting should end after all the items of agenda have been discussed.	1. The Secretary should take signatures of all the members present and pradhan on the proceeding book.

3. Methodology

1. The role of leader and the members and office bearers will be written on the black board.
2. Six members of the group will act as members. One as Pradhan, one as Up-pradhan and one as Secretary.
3. The rest will act as members of the Gaon Sabha.
4. At the end, as a teacher, I will give my comment.

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2. Six members of the group will act as members. One as Pradhan, one as Up-pradhan and one as Secretary.
3. The rest will act as members of the Gaon Sabha.
4. At the end, as a teacher, I will give my comment.

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Method Demonstration No. 8

HANDLING OF FLASHCARDS

1. **Why the subject is important**

   1. It is an important non-projected visual aid for focussing attention of group.
   2. It helps in simplifying the subject matter and used as an effective media.
   3. It helps the teacher to teach and learner to learn effectively.
   4. It helps in emphasising important stages of a message.
   5. It is a cheap, easily transferable and easy to use.
   6. It is an attractive type of visual for motivating action.
   7. It is a story-telling device.

2. **List of material needed**

   1. A set of flash cards
   2. Table.

3. **Demonstration breakdown**

Steps	Key points
1. Familiarity with the illustrations of flash cards by understanding words & pictures of each flash card.	1. Illustration in each card to be understood for commentry.
2. Let the cards be arranged in sequence to your need and requirements.	1. Cards for display to be kept separately.
3. Arrange the class or group so that the flash cards are visible to all members of the group.	1. The group should not be of more than 30 to 35 persons.
4. Stand with arranged flash cards. Lefthand palm acting as tripod for the lower edge of the flash card and right hand holding the cards.	1. Do not cover the words of pictures of flash cards by hand.
Presentation	
5. Hold flash cards against body and not up in the air.	1. Holding should make possible the act of Flancing on cards.
6. Commentary should start with the introduction of the message to be displayed through cards.	1. Use of simple words and local language be ensured.

7. Account for the cards before the audience and connect with other by changing and slid behind the other after use and so on.	1. Slip the card without causing least distraction.
8. Glance down the cards for correct display and commentary.	1. Maintain continuity in flash cards illustration depicting action.
9. Recapitualation of all steps of demonstration.	1. Ensure audience participation.
10. Self demonstration be given by the teacher and one demonstration be practiced by one of the trainee.	1. Central message to be emphasised.

4. Precautions

1. Use flash cards for a group of not more than 30 to 35 persons.
2. Hold cards in a manner that they are visible to all.
3. Use simple words, local expressions and local names.
4. Turn or change the flash card very skillfully so that the continuity is maintained.

5. Economics

It is one of the cheap visual aids. One series of flashcards cost for Rs.3/- each. Through this a message is conveyed to 30 to 35 persons in one unit of period of one hour. If the same message is told one by one it will take 30 to 35 hours. One flash card will be prepared at the most in 5 hours.

a) It is cheap
b) It is time saving.
c) No accessories or other items required for display.

6. Avalability

It can be available from:

1. Literacy House, Singarnagar, Lucknow.
2. National A.V.Aid Corporation, 6-Daryaganj, Delhi.

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Method Demonstration No: 9

HOW TO HANDLE FLANNEL GRAPH ?

1. Why the subject is important?

General:-

To equip the VLWs with the art of using flannel graph for educating village people effectively.

Flannel graph is important because:-

a) It is an important visual aid to communicate the message effectively.

b) It is very attractive as it leaves dramatic effect upon the mind of audience.

c) It is simple and very easy to be handled.

d) It is not much expensive.

e) It is easily available and transportable.

f) It can be prepared with simple photo graphs, design and cut out easily available from old magazines.

2. Place, Date & Time.

3. List of equipments:

i. Flannel board. ii. Flannel board stand.
iii. One set or sets of flannel graphs. iv. One stool or table.
v. Pointer..

4. Demonstration break-down:

Important steps.	Key points
1. Arrange the pieces according to sequence and check once again.	1. Arrange according to number from the mixed lot.
2. Keep every set of materials in a separate envelope.	2. Write the subject on the big face of the envelope, then and there.
3. Make proper sitting arragements if necessary.	3. Divide the group in two parts if it is larger.
4. Place the flannel board at eye level and at a slightly inclined angle.	4. Tilt the surface back slightly; so that pieces will not topple down. Ask last man if he can see it.
5. Start telling the story. Placing the pieces on board, in sequence one by one.	5. The flannel board should not be over-crowded and maintain sequence by doing wrong emphasise the point.

6. Remove those pieces which are not further needed at the flannel board.	6. Allow the audience sufficient time to see and under-stand. Don't remove if whole story is to be build up.
7. Evaluate the effects on the audience.	-
8. Remove all the pictures.	-
9. Again arrange them in sequence and place them in separate envelope.	
10. Summarise all the steps.	Questions may be asked to have appropriate answer needed for summarisation.
11. Tell the source of availability with economics.	

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Method Demonstration No: 10

HANDLING OF SLIDE PROJECTOR

1. Objectives:

a. To give the trainees complete knowledge about the different parts of a slide projector.

b. To give the trainees the skill in operating the projector, so that they may use it effectively in the field.

c. To give the trainees knowledge about the importance of a slide projector.

2. Place, date and time:

3. List of equipments needed:

1. Slide projector.
2. Slides.
3. Transformer.
4. Electric source.
5. Extension wire.
6. Screen.
7. Table.
8. Black Board & Chalk.

4. Demonstration procedure:-

(a) Introduction:-

"A projector is a mechanical contrivance to project any object on the screen, so as to develop real impressions on the mind of the people very effectively."

Important parts of the slide projector:-

1. Film guide: 2. Diapositive. 3. Condensing lense. 4. Reflector. 5. Off and on switch for the lamp. 6. Projection lamp. 7. Film gate. 8. Projection lense. 9. Cooling fan. 10. Screw for adjusting height. 11. Main connections. 12. The screen.

(b) Break-down of Demonstration:

Important steps.	Key points.
1. Bring out the slide projector from the case and put it on the table.	1. Bring out carefully to avoid damages.
2. Show and explain the functions of the different parts of the projector.	2. Be sure that all parts are in working order.

3. (a) Join electic connections:	3 a) Connections must be carefully observed. Wire should be rounded the table leg, so that there may be no disturbance to the projector.
(b) Use transformer.	b) The transformer should be used if the projector is of 110 V.
4. Fix screen and projeetor at required distance.	4. The distance will depend upon the size of the lense.
5. Keep slides in order.	5. Put number on slides.
6. Fix slider and slides in it.	6. Ensure that slides are fixed upward down position and the front side facing the light.
7. Focus the lense and explain the adjustments.	7. See that picture on the screen is sharp and not blurred.
8. Show the slide on the screen and explain the method to adjust another slide.	8. Show correct method of putting slide in the projector.

(e) Summarization:- The whole demonstration will be summarized as:-

i. Requirements.

ii. Importance and utility of the projector.

iii. Different parts of the projector.

iv. Actual operation of the projector.

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Method Demonstration No. 11.

HOW TO HANDLE AN OPAQUE PROJECTOR

1. OBJECTIVES

1. To give the trainees complete knowledge about the different parts of an opaque projector.
2. To impart the skill of operating the projector.

2. Importance

1. It projects and enlarges pictures drawings, photos, maps, diagrams and even three diamentional small things.
2. It attracts attention and creates interest.
3. It communicates the message effectively.
4. It is easy to handle.
5. It is less expensive.
6. It overcomes language barrier.
7. It is useful for illiterates also.

3. List of equipment needed

1. Table; (ii) Opaque projector; (iii) Connecting wire; (iv) Screen; (v) pictures; (vi) photos; (vii) writings; (viii) picture reel; and (ix) blackboard.

4. Parts of the opaque projector and their functions

1. Adjustable stand:	For giving support and adjusting height.
2. Base plates:	To carry pictures and writings (Max. size $7\frac{1}{2}$ x $6\frac{1}{4}$") which are projected on the screen.
3. Carrier for photo display:	For displaying smaller separate photos.
4. Projection bulb:	For light.
5. Lens:	For concentrating light.
6. Cooling fan:	To cool the machine.
7. Reflectors.	Four reflectors of glazed plates.
8. Mirror:	For reflections.
9. Connecting wire:	To connect with any point of elecy.
10. Screen:	For image projection.

5. Demonstration breakdown

Important steps	Key points
1. Keep the opaque projector on the table and stand at the desired height.	1. Do it carefully to avoid damages.
2. Show and explain the functions of the different parts of the opaque projector.	2. Use step down transformer if voltage is more than 110.

3. Join electric connections.

3. Keep distance according to the size of the picture to be projected.

4. Fix screen and projector at required distance.

4. Have the switch on and check it.

5. Press the slit and keep picture in right position on the base plate.

5. Keep the top of the picture on outer back side of the projector. (Max. size $7\frac{1}{2}$x$6\frac{1}{4}$")

6. For displaying seperate photos of smaller size remove the base plate and fix photo carriers.

6. May have pictures in sequence in the form of a reel to deal a complete topic.

7. Focus the lens so that projection is clear.

7. Separate small photos may be mounted on cardboard.

8. Show the picture, explain it and then change it.

8. Fix photos on the carrier before putting the latter in the Projector.

9. For enlargement of pictures and drawings fix blank paper or a board card and let them projected on it. Draw lines with pencil on the enlarged pictures. It may be coloured afterwards.

<u>Precautions</u>

1. Handle the machine carefully to avoid breakage.
2. Use it with 110 voltage. Use step down transformer if voltage is higher.
3. Handle lens carefully while adjusting focus.

Method Demonstration No: 12

HOW TO PREPARE PAPER SLIDE?

1. Why the subject is importent?

1. It helps to prepare visual aids.
2. Visual aids are an essential part of the communication process.
3. Can be utilized to ensure better communications.
4. Attracts attention, creates interest and makes the subject matter easy and palatable.

2. List of equipments and material needed:

1. Paper. 2. Translucent paper (Cellophane paper).
3. Scissors. 4. Gum bottle. 5. Razor or blade.
6. Colours. 7. Pencil, rubber. 8. Scale. 9. Brush.
10. A dish of water. 12. Blotting paper.

3. Demonstration:

i. Preparation of the slide cover:

Importent steps	Key points
1. Cut the paper (thick according to outer size of slide 2"x2" with the help of Scissors.	Size of paper 2"x2". Folds should be intact.
2. The thick paper should be cut in such a way that one side should remain in tact. The fold should begin from this side.	
3. Cut the inner boundry of the projection area which is 3.3.mm x2.2 mm) with the help of a blade by marking previously with pencil lines.	This can be done by using blade on the lines indicated.
4. Cut another paper of 2"x2" in size mark out with pencil line the projection area by putting the previous slide case over it.	The slide case prepared previously should be held tightly. It will be handled by the trainees.

Transparency:

1. Cut the transparent paper of 2"x2" size and mark out the projection area by putting it in between the folds of the slide by pencil.	The folds should be held tightly.

2. Write or draw on the transparent paper one message in the middle /like it by pen and colour it if you/and think it necessary.	This should be done by taking out the transparent paper and after drawings or writings has been done, put it again inside the folds. Involve the trainees.
3. Secure two folds of the slide mount enclosing the transparent paper inside it by gum and allow it to dry.	Do not use it until it becomes sufficiently dry and you have numbered it. Involve the trainees.

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1. A.V. Aids. Hass and Packer.

2. Better teaching and training with hand made slides. communication media, USAID. Mission to India.

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Method Demonstration No:13.

HANDLING OF PA.SET

Objectives:

i) Helps in mobilisation and formation of public opinion.

ii) Helps in mass contact and extension of programme in short period to a large number of people.

iii) Publicity purpose.

iv) Announcements.

v) Social service railway announcements and control of crowds.

vi) Musical programme Kavi Sammelan.

vii) Competitions and mass rallies.

viii) Administrative announcements.

ix) Instructional purposes.

Date Time Place

Material required:

1) Amplifier 400
2)Mike 1.5
3) Mike stand
4) Mike cable
5) Battery or electric power.
6) Lead or chord
7) Horn
8) Unit
9) 100 ft. plastic wire to connect unit and horn.

Demonstration break up.

Steps	Key points.
i) Fix mike with mike stand.	Adjustment of mike to the height of the speaker.
ii) Connect mike chord with mike and amplifier.	Don't be very close to the microphone while speaking maintain a bit of distance.
iii) Fix unit with horn.	Horn - Do not keep at the back and facing the speaker. Do not keep parallel to the speaker.

	Keep in front and at a distance.
iv) Connect horn and amplifier with plastic wire.	Wait till there is light and valve is warmed up and there is sound.
v) Connect amplifier with source of power battery or electric with a lead or the chord.	Tune it properly by volume control.
vi) Now it is ready for use.	Adjust tone.

Precautions.

i) Check up the voltage of the amplifier, the power and use tranformer if necessary.

ii) Avoid wrong connections.

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Method Demonstration No:14

DECORATION OF SALAD DISHES

Objectives:

i) To present a dish in a better and attractive manner.

ii) To make the food more appetizing and palatable.

iii) To serve natural and nutritive food with the diet.

iv) To have fresh and raw vegetable.

v) To get economic dish.

Date Time Place

List of equipments:

Plates - 5
Knives - 2
Bucket - 1
Basin - 1
Jug - 1
Towel and soap - Apron.

Material required:

Tomatoes - ½ Kg.
Carrots - 250 grams.
Radish - 250 grams
Onions - 250 grams.
Potatoes - 100 grams.
Lemon - Two
Green chillies - 50 grams.
Ginger - 10 grams
Salt.
Cloves black paper.
Zira

Demonstration break up.

Steps	Key points
i) Select fresh tomatoes, carrot radish, turnip, salad leave green peas, corenthus, green chillies and lemon etc. in winter, and cucumber, tomatoes, onions, potatoes, lemon, corenthus in summer.	Always use healthy fruits which are not over-riped.
ii) Wash hands.	

iii) Wash vegetable selected with the water of potassium permegnate.	Food borne diseases are caused by eating vegetables without washing.
iv) Peal the onions and boiled potatoes. Scrap the upper part of carrot and radish with knife so that it may become clean.	Steel knife should be used as iron knife is not sanitory.
v) Plan any design according to which you like to decorate the plate and cut the vegetable accordingly in long pieces or round pieces or in any other shape.	Select vegetables of different colours. Arrange in such a way that it appeals to the eyes. Decorate according to the occasion.
vi) Decorate it according to the plan.	
vii) Spread salt, paper and lemon juice over the salad just before serving.	Sprinkling salt before hand will cause the salad to become watery, lemon juice will give better taste.

Precautions:

i) Iron knife should not be used. Use steel knife to cut vegetable.

ii) Vegetables should be washed with potassium permagnet to avoid entering the germs into our body.

iii) Salt and lemon should be spread over the salad just before serving.

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NILOKHERI

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LIST OF TEACHING STAFF

1. Dr. Herbert W.Butt - Principal.
2. Sh. Badri Singh - Vice-Principal.
3. Sh. C.L. Gupta - Lecturer in Audio-Visual Aids.
4. Sh. R.D. Kaushik - Superintendent, Refresher Training Unit.
5. Sh. T.M. Dak. - Lectural in Rural Sociology.
6. Sh. Baldev Singh. - Instructor in Agriculture.
7. Sh. A.K. Chakravarty. - Chief Instructor Workshop.
8. Sh. H.C. Luthra. - Design Engineer.

LIST OF GUEST SPEAKERS

1. Sh. Madan Lal .... - Deputy Director, ICDP., Bikaner, Rajasthan.
2. Prof. S.N. Singh - Professor of Rural Sociology, I.A.R.I., New Delhi.
3. Dr. S.M. Pathak. - Specialist, Farm Management, Directorate of Extension, New Delhi.
4. Sh. Natha Singh. - Block Development Officer, Nilokheri.
5. Sh. R.K. Rath - Deputy Secretary, Department of Agriculture, Krishi Bhavan New Delhi.
6. Dr. Feldon. - Specialist, Ford Foundation, New Delhi.

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